

# SLIPPERY ROCK UNIVERSITY

## 2022-2023

### UNDERGRADUATE CATALOG



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## Rock Solid Education

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The statement states:

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**N**

- Non-Western History, Minor (p. 886)
- Nonprofit Management in Art, Minor (p. 835)

**O**

- Organizational Security, Minor (p. 912)

**P**

- Philanthropy and Nonprofit Management, Minor (p. 1044)
- Philosophy, Minor (p. 1057)
- Physical Education - Coaching, Minor (p. 208)
- Physics, Minor (p. 551)
- Political Science, Minor (p. 1078)
- Professional French, Minor (p. 948)
- Professional Japanese, Minor (p. 949)
- Professional Spanish, Minor (p. 949)
- Psychology, Minor (p. 711)
- Public Health, Minor (p. 743)

**R**

- Recreational Therapy, Minor (p. 763)

**S**

- Secondary School Mathematics, Minor (p. 495)
- Social Work, Minor (p. 770)
- Sociology, Minor (p. 1046)
- Spanish, Minor (p. 950)
- Special Education, Minor (p. 262)
- Sport Management, Minor (p. 120)
- Statistics, Minor (p. 496)
- Strategic Communication and Media, Minor (p. 152)
- Sustainable Management, Minor (BSBA majors only) (p. 95)

**T**

- Theatre, Minor (p. 1105)

**U**

- United States History, Minor (p. 886)

**W**

- Wellness, Minor (p. 209)
- Writing, Minor (p. 951)

**Certificates****A**

- Accounting, Certificate (p. 46)
- Applied History, Certificate (p. 880)
- Art: Design, Certificate (p. 833)
- Art: Digital Media, Certificate (p. 833)
- Art: Graphic Design, Certificate (p. 834)
- Art: Photography, Certificate (p. 835)

**B**

- Big Data Science, Certificate (p. 414)

**C**

- Creative Writing and Book Arts, Certificate (p. 915)
- Criminal Justice and Spanish Cultural & Language Competency, Certificate (p. 841)
- Culturally Relevant and Sustaining Music Education, Certificate (p. 984)

**D**

- Diversity and Inclusion, Certificate (p. 1022)

**E**

- Emergency Management, Certificate (p. 903)

**F**

- Fraud, Certificate (p. 904)

**G**

- Geographic Information Science, Certificate (p. 462)
- Global and Intercultural Communication, Certificate (p. 132)
- Global Learning and Cultural Competence - Japanese Studies, Certificate (p. 930)
- Global Learning and Cultural Competence - Professional Spanish, Certificate (p. 931)

**H**

- Hispanic Serving Non-Profit Organizations, Certificate (p. 1023)
- Homeland Security, Certificate (p. 909)
- Hospitality Management, Certificate (p. 114)
- Humanities and Health, Certificate (p. 1052)

**L**

- Latin American Studies, Certificate (p. 931)
- Living Well, Certificate (p. 208)



**M**

- Managing Nonprofit Organizations Serving the LGBTQIA+ Community (p. 1043)
- Middle Eastern Studies, Certificate (p. 933)

**O**

- Organizational Security, Certificate (p. 911)

**P**

- Philanthropy and Non-Profit Management, Certificate (p. 1044)

**R**

- Re-Entry Nonprofit Organization, Certificate (p. 1045)

**S**

- Sustainability, Certificate (p. 476)

**T**

- Teaching Health and Physical Education On-line, Certificate (p. 209)

**W**

- Writing for the Nonprofit Sector, Certificate (p. 1046)

## Rock Integrated Studies 2 Program

The Rock Integrated Studies 2 Program ("Rock Studies 2") at Slippery Rock University is the general education requirement for all undergraduate students in all majors at the University.

The purpose of a general education program is to introduce you to a broad range of knowledge in addition to the material you learn in your major. It includes 42 credits of the required 120 minimum credits required for graduation. There are three parts to the Rock Studies 2 program:

- The Rock
- Integrated Inquiry
- Thematic Threads

Educating students to be life-long learners is part of the mission of Slippery Rock University.

The Rock Studies 2 Program is unique as a general education program because it provides thematic interdisciplinary connections to guide you toward thinking critically and creatively, and to use knowledge from diverse places as they confront and analyze issues and problems.

The program under which you enter is the program that you will follow through to graduation. Students may not transfer between programs.

## Rock Studies 2 Program

### ROCK STUDIES 2 PROGRAM REQUIREMENTS

The Rock Studies 2 Program at Slippery Rock University is the general education requirements for all academic majors for incoming freshman. Since some majors prescribe specific courses within each category,

student should use this guide along with the curriculum guide and the My Rock Audit to make course selections in consultation with their adviser.

## THE ROCK (15 CREDITS)

### THE ROCK

Code	Title	Hours
SUBJ 139	Foundations of Academic Discovery <sup>1,2</sup>	3
ENGL 102	Critical Writing <sup>1</sup>	3
ENGL 104	Critical Reading <sup>1</sup>	3
MATH 117	Quantitative Reasoning <sup>1</sup>	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice <sup>1</sup>	
PHIL 110	Ethics and Civil Discourse <sup>1</sup>	
POLS 235	Civil Discourse and Democracy <sup>1</sup>	

<sup>1</sup> The Rock courses graded on A, B, C, NC basis.

<sup>2</sup> Course cannot be taken in first major subject area; course is waived for transfer and readmitted students with 24 or more credits; repeats do not have to be from the same subject area.

## INTEGRATED INQUIRY (15 CREDITS) <sup>3</sup>

### CREATIVE AND AESTHETIC INQUIRY (3 CREDITS)

Code	Title	Hours
ART 130	Visual Art Inquiry	3
DANC 130	Dance: Art and Culture	3
MUSI 130	Exploring Music	3
THEA 130	Art of Theatre	3

### HUMANITIES INQUIRY (3 CREDITS)

Code	Title	Hours
ENGL 180	Society on the Screen	3
GNDR 180	Disability and Social Justice	3
HIST 180	Spotlight on the Past	3
MODL 180	Introduction to World Cultures	3
PHIL 180	Philosophical Inquiry	3

### SOCIAL SCIENCE INQUIRY (3 CREDITS)

Code	Title	Hours
COMM 170	Communicology	3
CRIM 170	Crime: Why Do We Do It?	3
GES 170	Discover Geography	3
HSS 170	Lenses of Catastrophe	3
INDP 170	Making Sense of Our Social World	3
PE 168	Physical Activity and Wellbeing in Society	3
POLS 170	Investigating Politics	3
SOWK 170	Cultural Competence and Social Change	3

### NATURAL SCIENCES INQUIRY (3 CREDITS)

Code	Title	Hours
SCI 101	Science of Life	3

**PHYSICAL SCIENCES INQUIRY (3 CREDITS)**

Code	Title	Hours
SCI 102	Understanding the Physical World	3

<sup>3</sup> May take Integrated Inquiry courses in first major subject area; repeats do not have to be from same subject area.

**THEMATIC THREADS (12 CREDITS)****THEMATIC THREADS**

- Students should declare a thread in consultation with their academic adviser.
- Select 12 credits including one course from each category (World, Past, Present, Future).
- Six credits must be 300-level or above.
- No more than 4 credits from one subject area.
- Specific courses required in first major, regardless of prefix of course, cannot also be used to satisfy thread requirements.
- Any course with same prefix as student's first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.
- Courses can share with second majors /concentrations, minors, and certificates.
- Students may take more than one thread, but courses cannot be shared between threads.
- Citizenship and Social Problems (p. 18)
- Conservation, Technology and Imagination (p. 20)
- Cultural Literacy and Community Building (p. 22)
- Human Diversity and Well-Being (p. 24)
- Institutions and Human Innovation (p. 25)
- The United States in Global Context (p. 27)

**IMPORTANT INFORMATION****POLICY AND PROCEDURE NOTES:**

- Students must earn a total of 42 credits in Rock Studies 2 coursework.
- Students exempted from any Rock Studies 2 category must still earn a total of 42 credits in Rock Studies 2 coursework.
- Students may use Rock Studies Thematic Thread courses to complete a second major, minor, or certificate.
- Pass/No Credit courses may not be used to satisfy any Rock Studies 2 Requirement.
- Students who withdraw from the university and then return are responsible for the Rock Studies 2 requirements in effect the time of their return.

**GRADUATION REQUIREMENTS:**

- All undergraduate degree programs require a minimum of 120 credits.
- Thirty of the final 60 credits prior to graduation must be earned at SRU. In addition, individual departments may establish residency requirements for their majors and minors. Students should check with their academic adviser to determine the requirements for the academic program.
- Students must complete a minimum of 42 credits of Rock Studies 2 Coursework.

- Students must complete 48 credits of upper-level coursework. Thirty-nine of the 48 credits must be at the 300 level or higher, the additional 9 credits may include 100 or 200 level courses requiring a 3-credit prerequisite. At least 24 of the 48 credits must be completed at SRU.
- Bachelor of Arts degrees require language proficiency at the 103-class level. Exemption by placement or examination is offered.
- Students must complete at least 45 credits at SRU to be considered for Latin Honors at the point of graduation.
- Students who wish to earn two degrees must complete 150 credits, all requirements for both degrees, and meet the language requirement if one of the degrees is a BA. Students only need to meet the Rock Studies requirement for the first degree/major.

**TRANSFER STUDENTS:**

- New transfer students follow the Rock Studies 2 Program requirements beginning in Summer 2022.
- Transfer courses valued as a percentage: 2.33, 2.5, etc. may be used to meet requirements, however, students must still earn a total of 42 Rock Studies 2 credits.
- Students transferring 24 or more credits are exempt from Foundations of Academic Discovery.
- Transfer students must still earn a total of 42 credits in the Rock Studies 2 program, unless the criteria of general education completion is met as defined in the Board of Governors Policy 1999-01-A The Student Transfer Policy.

**COMPUTER COMPETENCY:**

All students at SRU must demonstrate computer competency through one of the following methods:

- Equivalent transfer coursework or successfully complete one of the following courses at SRU:
  - CPSC 100 - Introduction to Computing
  - CPSC 110 - Computer Concepts
  - CPSC 130 - Introduction to Computing and Programming
  - PE 202 - Technology for Wellness
- Pass the SRU Computer Competency Exam - CPSC 099

**DIVERSITY, EQUITY, AND INCLUSION (DEI):**

All students must complete a course with the "DEI Diversity, Equity and Inclusion" attribute before they graduate from SRU. The DEI course can come from any department and can be used anywhere in your degree requirements.

**BEGINNING ALGEBRA (ESAP 110):**

All students must demonstrate competency through MATH SAT or ACT scores, appropriate high school coursework, or the ALEKS placement test. If competency is not met, students must complete Beginning Algebra and complete 123 credits for graduation.

**READMITTED STUDENTS:**

- Students readmitted to the university follow the Rock Studies 2 Program requirements.
- Students with at least 24 or more credits are exempt from Foundations of Academic Discovery.

**Citizenship and Social Problems**

This thread considers the complex needs and demands of different societies. Students will evaluate the effectiveness of policies at

remedying social problems, and to see the connections between policies that prioritize multicultural inclusion and the existence of a healthy civil society. Some courses will connect past policies and practices to the ongoing effects of racism, homophobia, misogyny, classism, and/or other inequalities in contemporary society.

## CURRICULUM GUIDE

Code	Title	Hours
<b>World</b>		
Select one of the following:		3
ARAB 101	Arabic Language and Culture I	
ARAB 102	Arabic Language and Culture II	
ARAB 103	Arabic Language and Culture III	
ARAB 215	Topics in Arabic Culture	
CDEV 248	Human Development and Education	
CRIM 326	Victimology	
CRIM 328	Transnational Crime & Justice	
DANC 318	Dance in the Political World	
ENGL 314	European Film	
ENGL 316	Asian Film	
FREN 101	French Language and Culture I	
FREN 102	French Language and Culture II	
FREN 103	French Language and Culture III	
FREN 215	Topics in French and Francophone Culture	
GES 344	Environmental Justice	
HIST 151	Ancient World to the Age of Global Encounters	
HIST 152	Early Modern to Contemporary World	
HIST 346	Rise of Imperial Britain	
HIST 426	French Revolution and Napoleon	
INDP 106	Race and Ethnic Diversity in the USA	
JAPN 101	Japanese Language and Culture I	
JAPN 102	Japanese Language and Culture II	
JAPN 103	Japanese Language and Culture III	
JAPN 215	Topics in Japanese Culture	
MRKT 303	Issues in Global Business	
MUSI 1XX/2XX	Music Ensembles <sup>1</sup>	
PHIL 140	World Religions	
PHIL 331	Social and Political Philosophy	
PHIL 372	Modern Western Philosophy	
POLS 110	Foundations of Political Science	
POLS 322	The United Nations and International Law	
PSYC 105	Introduction to Psychology	
RCTH 120	Disability, Community Inclusion, and Diversity	
SPAN 101	Spanish Language & Culture I	
SPAN 102	Spanish Language & Culture II	
SPAN 103	Spanish Language & Culture III	
SPAN 215	Topics in Hispanic Culture	
<b>Past</b>		
Select one of the following:		3
CDEV 251	Mental Health in America	
CRIM 380	Women & the Criminal Justice System	

EGEO 100	Environmental Geology
ENGL 243	Literature of the Women's Movement
GNDR 115	Introduction to Gender Studies
HIST 201	Colonial US to the Civil War Era
HIST 202	US Civil War Era to Present
HIST 313	U.S. Manhood and Masculinities
HIST 318	Gender and Sexuality in European Society
HIST 323	African American History to 1876
HIST 324	African American History Since 1876
HIST 326	The Long Civil Rights Movement
HIST 358	American Popular Culture, 1865 to the Present
HIST 453	American Constitutional History and Law
INDP 201	Principles of Sociology
INDP 340	Social Inequality
LEAD 352	Self Leadership
PHIL 101	Introduction to Philosophy
PHIL 123	Ethics
PHIL 335	Philosophy of Law and Justice
POLS 215	Introduction to Political Theory
POLS 351	Politics of Race
POLS 357	Civil Liberties and Civil Rights
PSYC 302	Psychology of Criminal Behavior
SOWK 105	Human Diversity
STAT 152	Elementary Statistics I
<b>Present</b>	
Select one of the following:	
COMM 215	Small Group Communication
CRIM 110	Introduction to Criminology & Criminal Justice Systems
CRIM 327	Criminal Justice and the Multicultural Community
CRIM 345	Juvenile Delinquency
CRIM 468	Crime & Media
ECON 105	Economics of Social Issues
ECON 202	Principles of Microeconomics
EGEO 368	Women in Science
ENGL 242	African-American Literature
ENGL 410	Literature of the Environment
GERO 425	Women and Aging
GES 135	Introduction to Environmental Problems
GES 235	Conservation
HLTH 101	Personal Health
INDP 323	Deviant Behavior
INDP 342	Sociology of Aging
NLPA 120	Civic Engagement and Community Decision-Making
NLPA 220	Introduction to Nonprofit Management
NLPA 305	Financial Best Practices for Decision Makers
NLPA 325	Social and Ethical Issues in Philanthropy and Fundraising
PE 342	Wellness through Movement

PHIL 324	Environmental Ethics
PHIL 341	Philosophy of Religion
PHIL 375	Existentialism and Phenomenology
POLS 103	International Relations
POLS 223	Law and Courts
POLS 333	The Political Film
SPAN 110	Spanish for Educators
SPAN 121	Spanish for Health Professionals

**Future**

Select one of the following:	3
ART 105-114	Basic Studio <sup>2</sup>
ART 205-214	Basic Studio <sup>3</sup>
BIOL 300	Social and Ethical Issues in Genetics
CHEM 204	Introduction to Forensic Science
CPSC 102	Collaborative Information Technology and Society
CRIM 333	Crime, Justice and Society
CYBR 101	Cybersecurity in the Era of Evolving Technology
ECON 201	Principles of Macroeconomics
GES 355	Earth's Changing Climate
GES 362	Applications in Sustainability
HCAM 230	US Healthcare Systems
INDP 103	Contemporary Social Problems
LEAD 251	Leadership Theory
LEAD 315	Mindfulness and Brain
LEAD 350	Multicultural Leadership
NLPA 200	Empowered to Serve
POLS 101	American National Government
POLS 220	Foreign Policy
POLS 255	Introduction to Public Policy
POLS 303	Seminar in Democracy
POLS 306	Campaigns & Elections
POLS 327	Public Opinion and Political Attitudes
POLS 350	Transnational Terrorism
POLS 364	Using Evidence to Solve Public Problems
SOWK 230	Social Justice and Equality
SOWK 300	Crisis Intervention

**Total Hours** 12

<sup>1</sup> Select one ensemble: MUSI 109, MUSI 113, MUSI 114, MUSI 115, MUSI 116, MUSI 117, MUSI 118, MUSI 119, MUSI 120, MUSI 121, MUSI 122, MUSI 123, MUSI 124, MUSI 125, MUSI 126, MUSI 192, MUSI 193, MUSI 194, MUSI 196, MUSI 209, MUSI 213, MUSI 214, MUSI 215, MUSI 216, MUSI 217, MUSI 218, MUSI 219, MUSI 220, MUSI 221, MUSI 222, MUSI 223, MUSI 224, MUSI 225, MUSI 226, MUSI 233, MUSI 237, MUSI 292, MUSI 293, MUSI 294, MUSI 296

<sup>2</sup> Select one from: ART 105, ART 106, ART 107, ART 108, ART 109, ART 110, ART 111, ART 112, ART 113, ART 114

<sup>3</sup> Select one from: ART 205, ART 206, ART 207, ART 208, ART 209, ART 210, ART 211, ART 212

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Citizenship and Social Problems Thematic Thread (CISP)

Revised 02.23.2023

UCC: 01.31.2023

## Conservation, Technology and Imagination

This thread examines the impact of changing technologies on social organization, culture, and human well-being. Some courses will explore the relationships between people and the non-human world through creative and/or scientific lenses. Other courses will explore technological and environmental challenges facing society and even develop imaginative responses.

## CURRICULUM GUIDE

Code	Title	Hours
World		
Select one of the following:		3
ART 226	Overview of World Art	
ART 335	The Renaissance Tradition	
BIOL 105	Environmental Biology	
BIOL 110	The Human Body: Fundamentals of Structure and Physiology	
CDEV 248	Human Development and Education	
COMM 217	Intercultural Communication	
COMM 405	Global Media	
COMM 480	The Communication Age	
DANC 305	Society and Social Dance	
EGEO 131	Oceanography	
ENGL 338	Creative Writing: Creative Nonfiction	
ENGL 402	World Literature	
GES 135	Introduction to Environmental Problems	
GES 324	Environmental Law and Policy	
HEMT 114	Sustainability in Food and Hospitality	
HIST 464	The Scientific Revolution of the 17th and 18th Centuries	
MRKT 303	Issues in Global Business	
PHIL 123	Ethics	
PHIL 140	World Religions	
PHIL 343	Asian Philosophy	
PHYS 317	Space Science	
POLS 365	International Political Economy	
POLS 369	Politics of Developing Areas	



SOWK 105	Human Diversity
THEA 269	Playwriting
<b>Past</b>	
Select one of the following:	
ART 225	Overview of Western Art
ART 355	Early Modern Art
COMM 419	Propaganda: Ideology, Communication Warfare, and Social Control
EGEO 100	Environmental Geology
ENGL 214	Introduction to Film Analysis
ENGL 220	Introduction to Literary and Cultural Studies
ENGL 312	Introduction to Shakespeare
ENGL 314	European Film
ENGL 315	The Cinematic Review: Historical and Critical Writing
HIST 152	Early Modern to Contemporary World
HIST 202	US Civil War Era to Present
HIST 347	Twentieth Century British Culture
HIST 358	American Popular Culture, 1865 to the Present
HIST 364	History of Medicine
MUSI 104	Exploring American Music
PHIL 170	American Philosophy
PHIL 261	Philosophy of Art
PHIL 375	Existentialism and Phenomenology
THEA 132	Stagecraft
THEA 335	Costume Design and History
THEA 392	History of Musical Theatre
THEA 393	History of Theatre Design and Architecture
<b>Present</b>	
Select one of the following:	
ART 105-ART 114	Basic Studio <sup>1</sup>
ART 205-ART 214	Intermediate Studio <sup>2</sup>
COMM 115	Visual Literacy
COMM 263	Mass Media and Society
COMM 458	Media Criticism
DANC 125	Experiencing Dance: Techniques and Styles
ECON 201	Principles of Macroeconomics
ENGL 205	Introduction to Professional Writing
ENGL 410	Literature of the Environment
EXSC 250	Medical Terminology
EXSC 305	The Truth About Weight Loss
FIN 341	Entrepreneurial Finance
GES 235	Conservation
MRKT 230	Principles of Marketing
MUSI 1XX/2XX	Music Ensembles <sup>3</sup>
MUSI 3XX/4XX	Music Ensembles <sup>4</sup>
NLPA 320	Community Change and Development
NLPA 328	Program Design and Evaluation in Nonprofit and Governmental Organizations
PCRM 104	Foundations in Sustainability
PE 335	Science of the Mind-Body Connection

PE 364	Biomechanics of Individuals with Disabilities
PHIL 326	Business Ethics
PHIL 351	Philosophy of Natural Science
PHIL 362	Philosophy of Mind
POLS 333	The Political Film
PSYC 105	Introduction to Psychology
PSYC 205	Environmental Psychology
PSYC 208	Personality
THEA 215	Drawing/Drafting/CAD
THEA 235	Costume Technology
THEA 359	Studies in Audience Development
<b>Future</b>	
Select one of the following:	
BIOL 300	Social and Ethical Issues in Genetics
COMM 110	Communication Concepts
CPSC 102	Collaborative Information Technology and Society
CPSC 300	Challenges of Computer Technology
CYBR 101	Cybersecurity in the Era of Evolving Technology
ENGL 411	Science Fiction
ENGL 429	Grant and Proposal Writing
EXSC 204	Introduction to Esports
FIN 100	Personal Financial Planning
GES 115	Introduction to Geospatial Technologies
GES 215	Planning for Sustainable Communities
GES 355	Earth's Changing Climate
GES 362	Applications in Sustainability
LEAD 215	Introduction to Consciousness
LEAD 244	Artificial Intelligence in Cognitive Studies and Film
LEAD 315	Mindfulness and Brain
LEAD 344	Left and Right Brain: From Neuron to Culture
MGMT 130	Dynamics of Global Commerce
MGMT 370	Sustainable Entrepreneurship and Innovation
MGMT 459	Sustainable Business Consulting
PHIL 113	Formal Logic
PHIL 324	Environmental Ethics
PHIL 338	Ethics, Technology, and the Future
STAT 152	Elementary Statistics I
THEA 131	Fundamentals of Acting

**Total Hours****12**<sup>1</sup> Select one from:

ART 105, ART 106, ART 107, ART 108, ART 109, ART 110, ART 111, ART 112, ART 113

<sup>2</sup> Select one from:

ART 205, ART 206, ART 207, ART 208, ART 209, ART 210, ART 211, ART 212, ART 213, ART 214

- <sup>3</sup> Select one Music Ensemble at the 100/200 level:  
MUSI 109, MUSI 113, MUSI 114, MUSI 115, MUSI 116, MUSI 117, MUSI 118, MUSI 119, MUSI 120, MUSI 121, MUSI 122, MUSI 123, MUSI 124, MUSI 125, MUSI 126, MUSI 192, MUSI 193, MUSI 194, MUSI 196, MUSI 209, MUSI 213, MUSI 214, MUSI 215, MUSI 216, MUSI 217, MUSI 218, MUSI 219, MUSI 220, MUSI 221, MUSI 222, MUSI 223, MUSI 224, MUSI 225, MUSI 226, MUSI 233, MUSI 237, MUSI 292, MUSI 293, MUSI 294, MUSI 296
- <sup>4</sup> Select one Music Ensemble at the 300/400 level:  
MUSI 309, MUSI 313, MUSI 314, MUSI 315, MUSI 316, MUSI 317, MUSI 318, MUSI 319, MUSI 320, MUSI 321, MUSI 322, MUSI 323, MUSI 324, MUSI 325, MUSI 326, MUSI 392, MUSI 393, MUSI 394, MUSI 396, MUSI 409, MUSI 413, MUSI 414, MUSI 415, MUSI 416, MUSI 417, MUSI 418, MUSI 419, MUSI 420, MUSI 421, MUSI 422, MUSI 423, MUSI 424, MUSI 426, MUSI 437, MUSI 492, MUSI 493, MUSI 494, MUSI 496
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Conservation, Technology & Imagination Thematic Thread (CTI)

Revised 10.13.2022

UCC: 10.11.2022

# Cultural Literacy and Community Building

This thread identifies practices that promote cultural literacy and community building. Some courses will explore ways that institutional support for culture and creativity promote community strength. Other courses will make connections between the marginalization of communities and negative social outcomes or introduce students to the impact that external forces such as climate change or food insecurity have on communities and populations.

## CURRICULUM GUIDE

Code	Title	Hours
World		
Select one of the following:		3
ARAB 101	Arabic Language and Culture I	
ARAB 102	Arabic Language and Culture II	
ARAB 103	Arabic Language and Culture III	
ARAB 215	Topics in Arabic Culture	
CDEV 248	Human Development and Education	
COMM 110	Communication Concepts	
CRIM 326	Victimology	

CRIM 327	Criminal Justice and the Multicultural Community
DANC 318	Dance in the Political World
ENGL 244	Native American Literature
ENGL 246	U.S. Latino/a Literatures
ENGL 402	World Literature
ENGL 316	Asian Film
FREN 101	French Language and Culture I
FREN 102	French Language and Culture II
FREN 103	French Language and Culture III
FREN 215	Topics in French and Francophone Culture
HIST 151	Ancient World to the Age of Global Encounters
HIST 152	Early Modern to Contemporary World
HIST 406	Mass Killing and Genocide in the Modern World
JAPN 101	Japanese Language and Culture I
INDP 310	Cultural Area Studies
INDP 322	Archaeology of the Americas
JAPN 102	Japanese Language and Culture II
JAPN 103	Japanese Language and Culture III
JAPN 215	Topics in Japanese Culture
MRKT 303	Issues in Global Business
MUSI 301	Women and Music
NLPA 120	Civic Engagement and Community Decision-Making
PE 342	Wellness through Movement
PHIL 101	Introduction to Philosophy
PHIL 140	World Religions
PHIL 324	Environmental Ethics
PSYC 300	Psychology of Women, Gender and Culture
SOWK 105	Human Diversity
SPAN 101	Spanish Language & Culture I
SPAN 102	Spanish Language & Culture II
SPAN 103	Spanish Language & Culture III
SPAN 215	Topics in Hispanic Culture
<b>Past</b>	
Select one of the following:	
ART 225	Overview of Western Art
ELEC 100	Early Childhood Education Theory & Practice
ENGL 312	Introduction to Shakespeare
ENGL 315	The Cinematic Review: Historical and Critical Writing
GES 215	Planning for Sustainable Communities
HIST 202	US Civil War Era to Present
HIST 344	The American City
HIST 404	Violence in Post-45 Europe
HIST 427	Nineteenth Century Europe
HIST 445	Americans and the Environment
INDP 106	Race and Ethnic Diversity in the USA
INDP 201	Principles of Sociology
MODL 105	Introduction to Asian Civilizations

PHIL 123	Ethics
PHIL 170	American Philosophy
POLS 101	American National Government
POLS 301	Organized Political Action
PSYC 244	Developmental Psychology
PSYC 289	Positive Psychology
PSYC 364	Child and Adolescent Development
THEA 132	Stagecraft
THEA 269	Playwriting
THEA 335	Costume Design and History
THEA 392	History of Musical Theatre
THEA 393	History of Theatre Design and Architecture

**Present**

Select one of the following: 3

ART 105-114	Basic Studio <sup>1</sup>
ART 205-214	Basic Studio <sup>2</sup>
COMM 215	Small Group Communication
DANC 125	Experiencing Dance: Techniques and Styles
DANC 223	Creative Dance for Children
DANC 305	Society and Social Dance
ENGL 328	Young Adult Literature
ENGL 338	Creative Writing: Creative Nonfiction
FIN 100	Personal Financial Planning
GERO 425	Women and Aging
GNDR 115	Introduction to Gender Studies
INDP 321	Minority Groups
INDP 326	Society, Culture and Self
MUSI 1XX/2XX	Music Ensembles <sup>3</sup>
MUSI 3XX/4XX	Music Ensembles <sup>4</sup>
NLPA 200	Empowered to Serve
NLPA 220	Introduction to Nonprofit Management
NLPA 328	Program Design and Evaluation in Nonprofit and Governmental Organizations
PE 115	Yoga and Well-Being
PE 241	Outdoor Pursuits
PE 364	Biomechanics of Individuals with Disabilities
PE 393	Nutrition for Physical Activity, Exercise, and Health
PHIL 326	Business Ethics
PSYC 276	Introduction to Abnormal Psychology
PSYC 315	Psychology of Sexual and Gender Diversity
SEFE 280	Cultural Minorities in Education
SPAN 131	Spanish for the Business World
THEA 131	Fundamentals of Acting
THEA 235	Costume Technology

**Future**

Select one of the following: 3

ACCT 209	Financial Accounting
COMM 263	Mass Media and Society
COMM 480	The Communication Age
CRIM 110	Introduction to Criminology & Criminal Justice Systems

ELEC 410	Culture and Politics of American Education
ENGL 205	Introduction to Professional Writing
ENGL 220	Introduction to Literary and Cultural Studies
ENGL 429	Grant and Proposal Writing
EXSC 204	Introduction to Esports
GERO 265	Aging and the Older Person
HLTH 101	Personal Health
INDP 330	Collective Behavior
LEAD 244	Artificial Intelligence in Cognitive Studies and Film
LEAD 251	Leadership Theory
LEAD 350	Multicultural Leadership
MUSI 104	Exploring American Music
MUSI 111	Introduction to Music Education
NLPA 320	Community Change and Development
NLPA 325	Social and Ethical Issues in Philanthropy and Fundraising
POLS 359	Policy Analysis and Evaluation
PSYC 240	Human Sexual Behavior
PSYC 321	Drugs and Behavior
SOWK 200	Introduction to Child Welfare
THEA 215	Drawing/Drafting/CAD

**Total Hours** 12<sup>1</sup> Select one from: ART 105, ART 106, ART 107, ART 108, ART 109, ART 110, ART 111, ART 112, ART 113, ART 114<sup>2</sup> Select one from:

ART 205, ART 206, ART 207, ART 208, ART 209, ART 210, ART 211, ART 212, ART 213, ART 214, ART 215, ART 216, ART 217, ART 218, ART 219, ART 220, ART 221, ART 222, ART 223, ART 224, ART 225, ART 226, ART 227, ART 228, ART 229, ART 230, ART 231, ART 232, ART 233, ART 234, ART 235, ART 236, ART 237, ART 238, ART 239, ART 240, ART 241, ART 242, ART 243, ART 244, ART 245, ART 246, ART 247, ART 248, ART 249, ART 250, ART 251, ART 252, ART 253, ART 254, ART 255, ART 256, ART 257, ART 258, ART 259, ART 260, ART 261, ART 262, ART 263, ART 264, ART 265, ART 266, ART 267, ART 268, ART 269, ART 270, ART 271, ART 272, ART 273, ART 274, ART 275, ART 276, ART 277, ART 278, ART 279, ART 280, ART 281, ART 282, ART 283, ART 284, ART 285, ART 286, ART 287, ART 288, ART 289, ART 290, ART 291, ART 292, ART 293, ART 294, ART 295, ART 296, ART 297, ART 298, ART 299, ART 300, ART 301, ART 302, ART 303, ART 304, ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313, ART 314, ART 315, ART 316, ART 317, ART 318, ART 319, ART 320, ART 321, ART 322, ART 323, ART 324, ART 325, ART 326, ART 327, ART 328, ART 329, ART 330, ART 331, ART 332, ART 333, ART 334, ART 335, ART 336, ART 337, ART 338, ART 339, ART 340, ART 341, ART 342, ART 343, ART 344, ART 345, ART 346, ART 347, ART 348, ART 349, ART 350, ART 351, ART 352, ART 353, ART 354, ART 355, ART 356, ART 357, ART 358, ART 359, ART 360, ART 361, ART 362, ART 363, ART 364, ART 365, ART 366, ART 367, ART 368, ART 369, ART 370, ART 371, ART 372, ART 373, ART 374, ART 375, ART 376, ART 377, ART 378, ART 379, ART 380, ART 381, ART 382, ART 383, ART 384, ART 385, ART 386, ART 387, ART 388, ART 389, ART 390, ART 391, ART 392, ART 393, ART 394, ART 395, ART 396, ART 397, ART 398, ART 399, ART 400, ART 401, ART 402, ART 403, ART 404, ART 405, ART 406, ART 407, ART 408, ART 409, ART 410, ART 411, ART 412, ART 413, ART 414, ART 415, ART 416, ART 417, ART 418, ART 419, ART 420, ART 421, ART 422, ART 423, ART 424, ART 425, ART 426, ART 427, ART 428, ART 429, ART 430, ART 431, ART 432, ART 433, ART 434, ART 435, ART 436, ART 437, ART 438, ART 439, ART 440, ART 441, ART 442, ART 443, ART 444, ART 445, ART 446, ART 447, ART 448, ART 449, ART 450, ART 451, ART 452, ART 453, ART 454, ART 455, ART 456, ART 457, ART 458, ART 459, ART 460, ART 461, ART 462, ART 463, ART 464, ART 465, ART 466, ART 467, ART 468, ART 469, ART 470, ART 471, ART 472, ART 473, ART 474, ART 475, ART 476, ART 477, ART 478, ART 479, ART 480, ART 481, ART 482, ART 483, ART 484, ART 485, ART 486, ART 487, ART 488, ART 489, ART 490, ART 491, ART 492, ART 493, ART 494, ART 495, ART 496, ART 497, ART 498, ART 499, ART 500

<sup>3</sup> Select one ensemble 100/200 level: MUSI 109, MUSI 113, MUSI 114, MUSI 115, MUSI 116, MUSI 117, MUSI 118, MUSI 119, MUSI 120, MUSI 121, MUSI 122, MUSI 123, MUSI 124, MUSI 125, MUSI 126, MUSI 127, MUSI 128, MUSI 129, MUSI 130, MUSI 131, MUSI 132, MUSI 133, MUSI 134, MUSI 135, MUSI 136, MUSI 137, MUSI 138, MUSI 139, MUSI 140, MUSI 141, MUSI 142, MUSI 143, MUSI 144, MUSI 145, MUSI 146, MUSI 147, MUSI 148, MUSI 149, MUSI 150, MUSI 151, MUSI 152, MUSI 153, MUSI 154, MUSI 155, MUSI 156, MUSI 157, MUSI 158, MUSI 159, MUSI 160, MUSI 161, MUSI 162, MUSI 163, MUSI 164, MUSI 165, MUSI 166, MUSI 167, MUSI 168, MUSI 169, MUSI 170, MUSI 171, MUSI 172, MUSI 173, MUSI 174, MUSI 175, MUSI 176, MUSI 177, MUSI 178, MUSI 179, MUSI 180, MUSI 181, MUSI 182, MUSI 183, MUSI 184, MUSI 185, MUSI 186, MUSI 187, MUSI 188, MUSI 189, MUSI 190, MUSI 191, MUSI 192, MUSI 193, MUSI 194, MUSI 195, MUSI 196, MUSI 197, MUSI 198, MUSI 199, MUSI 200<sup>4</sup> Select one ensemble 300/400 level:

MUSI 309, MUSI 313, MUSI 314, MUSI 315, MUSI 316, MUSI 317, MUSI 318, MUSI 319, MUSI 320, MUSI 321, MUSI 322, MUSI 323, MUSI 324, MUSI 325, MUSI 326, MUSI 327, MUSI 328, MUSI 329, MUSI 330, MUSI 331, MUSI 332, MUSI 333, MUSI 334, MUSI 335, MUSI 336, MUSI 337, MUSI 338, MUSI 339, MUSI 340, MUSI 341, MUSI 342, MUSI 343, MUSI 344, MUSI 345, MUSI 346, MUSI 347, MUSI 348, MUSI 349, MUSI 350, MUSI 351, MUSI 352, MUSI 353, MUSI 354, MUSI 355, MUSI 356, MUSI 357, MUSI 358, MUSI 359, MUSI 360, MUSI 361, MUSI 362, MUSI 363, MUSI 364, MUSI 365, MUSI 366, MUSI 367, MUSI 368, MUSI 369, MUSI 370, MUSI 371, MUSI 372, MUSI 373, MUSI 374, MUSI 375, MUSI 376, MUSI 377, MUSI 378, MUSI 379, MUSI 380, MUSI 381, MUSI 382, MUSI 383, MUSI 384, MUSI 385, MUSI 386, MUSI 387, MUSI 388, MUSI 389, MUSI 390, MUSI 391, MUSI 392, MUSI 393, MUSI 394, MUSI 395, MUSI 396, MUSI 397, MUSI 398, MUSI 399, MUSI 400

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**Important Curriculum Guide Notes**

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PASSHE - Pennsylvania State System of Higher Education Institutions

Cultural Literacy and Community Building Thematic Thread (CLCB)

Revised 07.01.2022  
UCC: 04.19.2022

## Human Diversity and Well-Being

This thread explores the importance of choices, decisions or activities that humans make which enhance our physical or emotional, mental well-being. Courses will explore the political, social, psychological, or biological identities that emerge, express themselves, and change in diverse settings. Across a range of disciplines, students will have opportunities to assess the past, present or future mental, social, economic, cultural or political challenges to individual and group identities.

## CURRICULUM GUIDE

Code	Title	Hours
<b>World</b>		
Select one of the following:		3
ARAB 101	Arabic Language and Culture I	
ARAB 102	Arabic Language and Culture II	
ARAB 103	Arabic Language and Culture III	
ARAB 215	Topics in Arabic Culture	
COMM 217	Intercultural Communication	
CRIM 326	Victimology	
ECON 202	Principles of Microeconomics	
ENGL 248	Asian Literature	
FREN 101	French Language and Culture I	
FREN 102	French Language and Culture II	
FREN 103	French Language and Culture III	
FREN 215	Topics in French and Francophone Culture	
FREN 306	France and Francophone Identities Today	
GES 303	Asia	
GES 344	Environmental Justice	
GNDR 415	Feminist Perspectives in the Disciplines	
HEMT 210	Contemporary Travel and Tourism	
HIST 318	Gender and Sexuality in European Society	
HIST 364	History of Medicine	
HIST 404	Violence in Post-45 Europe	
INDP 322	Archaeology of the Americas	
JAPN 101	Japanese Language and Culture I	
JAPN 102	Japanese Language and Culture II	
JAPN 103	Japanese Language and Culture III	
JAPN 215	Topics in Japanese Culture	
MUSI 1XX/2XX	Music Ensembles <sup>1</sup>	
MUSI 3XX/4XX	Music Ensembles <sup>2</sup>	
MUSI 301	Women and Music	
PE 115	Yoga and Well-Being	
PHIL 123	Ethics	
PHIL 341	Philosophy of Religion	
POLS 263	Introduction to Comparative Politics	
POLS 369	Politics of Developing Areas	
PSYC 105	Introduction to Psychology	
PSYC 300	Psychology of Women, Gender and Culture	
PSYC 315	Psychology of Sexual and Gender Diversity	

SPAN 101	Spanish Language & Culture I
SPAN 102	Spanish Language & Culture II
SPAN 103	Spanish Language & Culture III
SPAN 215	Topics in Hispanic Culture
Past	
Select one of the following:	
CRIM 302	Sexual Violence
DANC 305	Society and Social Dance
EGEO 100	Environmental Geology
EGEO 368	Women in Science
ENGL 242	African-American Literature
ENGL 244	Native American Literature
ENGL 314	European Film
ENGL 316	Asian Film
HIST 152	Early Modern to Contemporary World
HIST 202	US Civil War Era to Present
HIST 313	U.S. Manhood and Masculinities
HIST 323	African American History to 1876
HIST 324	African American History Since 1876
HIST 326	The Long Civil Rights Movement
HIST 337	Native American History
HIST 445	Americans and the Environment
INDP 202	Introduction to Anthropology
INDP 211	Biological Anthropology
INDP 212	Archaeology/World Prehistory
INDP 310	Cultural Area Studies
MS 100	The American Military Experience
PHIL 113	Formal Logic
PHIL 171	Philosophy of Human Existence
PHIL 325	Medical/Health Care Ethics
PHIL 335	Philosophy of Law and Justice
POLS 375	Women and Politics
Present	
Select one of the following:	
ART 105-114	Basic Studio <sup>3</sup>
ART 205-214	Basic Studio <sup>4</sup>
BIOL 110	The Human Body: Fundamentals of Structure and Physiology
COMM 110	Communication Concepts
CRIM 380	Women & the Criminal Justice System
DANC 125	Experiencing Dance: Techniques and Styles
EXSC 230	Stress Management
EXSC 250	Medical Terminology
GNDR 115	Introduction to Gender Studies
HCAM 275	Health Care Legal & Ethical Foundations
HLTH 311	International Health
INDP 324	The Family
INDP 326	Society, Culture and Self
INDP 340	Social Inequality
INDP 342	Sociology of Aging
LEAD 352	Self Leadership
MUSI 111	Introduction to Music Education

NLPA 120	Civic Engagement and Community Decision-Making
PE 241	Outdoor Pursuits
PE 335	Science of the Mind-Body Connection
PHIL 101	Introduction to Philosophy
PHIL 336	Philosophy of Gender and Sex
PHIL 362	Philosophy of Mind
POLS 301	Organized Political Action
POLS 351	Politics of Race
PSYC 244	Developmental Psychology
PSYC 321	Drugs and Behavior
PSYC 334	Health Psychology
SPAN 131	Spanish for the Business World
<b>Future</b>	
Select one of the following:	
BIOL 300	Social and Ethical Issues in Genetics
DANC 223	Creative Dance for Children
ENGL 214	Introduction to Film Analysis
ENGL 327	Healthcare Writing
ENGL 328	Young Adult Literature
ENGL 429	Grant and Proposal Writing
EXSC 304	Current Issues in Esports Health and Society
GERO 265	Aging and the Older Person
GERO 425	Women and Aging
GES 361	Gender and the Environment
HLTH 101	Personal Health
INDP 103	Contemporary Social Problems
INDP 226	Population and Society
INDP 309	Health and Society
LEAD 215	Introduction to Consciousness
LEAD 344	Left and Right Brain: From Neuron to Culture
LEAD 350	Multicultural Leadership
PCRM 342	Group Facilitation and Leadership
POLS 255	Introduction to Public Policy
POLS 327	Public Opinion and Political Attitudes
POLS 359	Policy Analysis and Evaluation
RCTH 120	Disability, Community Inclusion, and Diversity
SEFE 280	Cultural Minorities in Education
SOWK 105	Human Diversity
SPAN 110	Spanish for Educators
SPAN 121	Spanish for Health Professionals
STAT 152	Elementary Statistics I

**Total Hours****12**

- <sup>1</sup> Select one ensemble 100/200 level: MUSI 109, MUSI 113, MUSI 114, MUSI 115, MUSI 116, MUSI 117, MUSI 118, MUSI 119, MUSI 120, MUSI 121, MUSI 122, MUSI 123, MUSI 124, MUSI 125, MUSI 126, MUSI 192, MUSI 193, MUSI 194, MUSI 196, MUSI 209, MUSI 213, MUSI 214, MUSI 215, MUSI 216, MUSI 217, MUSI 218, MUSI 219, MUSI 220, MUSI 221, MUSI 222, MUSI 223, MUSI 224, MUSI 225, MUSI 226, MUSI 233, MUSI 237, MUSI 292, MUSI 293, MUSI 294, MUSI 296
- <sup>2</sup> Select one ensemble 300/400 level: MUSI 309, MUSI 313, MUSI 314, MUSI 315, MUSI 316, MUSI 317, MUSI 318, MUSI 323, MUSI 324, MUSI 325, MUSI 326, MUSI 392, MUSI 393, MUSI 394, MUSI 416, MUSI 417, MUSI 418, MUSI 419, MUSI 420, MUSI 421, MUSI 422, MUSI 437, MUSI 492, MUSI 493, MUSI 494, MUSI 496
- <sup>3</sup> Select one from: ART 105, ART 106, ART 107, ART 108, ART 109, ART 110, ART 111, ART 112, ART 113, ART 114
- <sup>4</sup> Select one from: ART 205, ART 206, ART 207, ART 208, ART 209, ART 210, ART 211, ART 212, ART 213, ART 214, ART 215, ART 216, ART 217, ART 218, ART 219, ART 220, ART 221, ART 222, ART 223, ART 224, ART 225, ART 226, ART 227, ART 228, ART 229, ART 230, ART 231, ART 232, ART 233, ART 234, ART 235, ART 236, ART 237, ART 238, ART 239, ART 240, ART 241, ART 242, ART 243, ART 244, ART 245, ART 246, ART 247, ART 248, ART 249, ART 250, ART 251, ART 252, ART 253, ART 254, ART 255, ART 256, ART 257, ART 258, ART 259, ART 260, ART 261, ART 262, ART 263, ART 264, ART 265, ART 266, ART 267, ART 268, ART 269, ART 270, ART 271, ART 272, ART 273, ART 274, ART 275, ART 276, ART 277, ART 278, ART 279, ART 280, ART 281, ART 282, ART 283, ART 284, ART 285, ART 286, ART 287, ART 288, ART 289, ART 290, ART 291, ART 292, ART 293, ART 294, ART 295, ART 296, ART 297, ART 298, ART 299, ART 300, ART 301, ART 302, ART 303, ART 304, ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 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867, ART 868, ART 869, ART 870, ART 871, ART 872, ART 873, ART 874, ART 875, ART 876, ART 877, ART 878, ART 879, ART 880, ART 881, ART 882, ART 883, ART 884, ART 885, ART 886, ART 887, ART 888, ART 889, ART 890, ART 891, ART 892, ART 893, ART 894, ART 895, ART 896, ART 897, ART 898, ART 899, ART 900, ART 901, ART 902, ART 903, ART 904, ART 905, ART 906, ART 907, ART 908, ART 909, ART 910, ART 911, ART 912, ART 913, ART 914, ART 915, ART 916, ART 917, ART 918, ART 919, ART 920, ART 921, ART 922, ART 923, ART 924, ART 925, ART 926, ART 927, ART 928, ART 929, ART 930, ART 931, ART 932, ART 933, ART 934, ART 935, ART 936, ART 937, ART 938, ART 939, ART 940, ART 941, ART 942, ART 943, ART 944, ART 945, ART 946, ART 947, ART 948, ART 949, ART 950, ART 951, ART 952, ART 953, ART 954, ART 955, ART 956, ART 957, ART 958, ART 959, ART 960, ART 961, ART 962, ART 963, ART 964, ART 965, ART 966, ART 967, ART 968, ART 969, ART 970, ART 971, ART 972, ART 973, ART 974, ART 975, ART 976, ART 977, ART 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- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

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PASSHE - Pennsylvania State System of Higher Education Institutions

Human Diversity and Well-Being Thematic Thread (HDWB)

Revised 03.03.2023

UCC: 02.28.2023

## Institutions and Human Innovation

This thread explores a variety of human institutions across politics, the arts, economics and other aspects of societies. Students will be able to make connections between characteristics of human institutions and the broader societies that created them, evaluate relationships between institutional past practices and contemporary successes or failures in innovation, and analyze systemic structures that influence the relationships humans have with each other and with the natural world.

## CURRICULUM GUIDE

Code	Title	Hours
World		
Select one of the following:		3
ARAB 215	Topics in Arabic Culture	
COMM 115	Visual Literacy	
COMM 217	Intercultural Communication	
ECON 326	International Economics	
EGEO 100	Environmental Geology	
FREN 215	Topics in French and Francophone Culture	



HCAM 300	Healthcare Systems: Global Perspectives and Analysis
HIST 151	Ancient World to the Age of Global Encounters
HIST 152	Early Modern to Contemporary World
HIST 364	History of Medicine
HIST 426	French Revolution and Napoleon
INDP 322	Archaeology of the Americas
JAPN 215	Topics in Japanese Culture
MRKT 303	Issues in Global Business
PE 342	Wellness through Movement
PHIL 101	Introduction to Philosophy
PHIL 140	World Religions
PHIL 331	Social and Political Philosophy
PHIL 335	Philosophy of Law and Justice
PHIL 336	Philosophy of Gender and Sex
PHIL 343	Asian Philosophy
PHIL 372	Modern Western Philosophy
POLS 103	International Relations
POLS 215	Introduction to Political Theory
PSYC 244	Developmental Psychology
SOWK 105	Human Diversity
SPAN 215	Topics in Hispanic Culture

**Past**

Select one of the following: 3

ART 335	The Renaissance Tradition
ART 355	Early Modern Art
CRIM 333	Crime, Justice and Society
ENGL 214	Introduction to Film Analysis
GNDR 115	Introduction to Gender Studies
HIST 201	Colonial US to the Civil War Era
HIST 202	US Civil War Era to Present
HIST 326	The Long Civil Rights Movement
HIST 344	The American City
HIST 346	Rise of Imperial Britain
HIST 404	Violence in Post-45 Europe
HIST 427	Nineteenth Century Europe
INDP 211	Biological Anthropology
INDP 212	Archaeology/World Prehistory
MUSI 104	Exploring American Music
MUSI 1XX/2XX	Music Ensembles <sup>1</sup>
MUSI 3XX/4XX	Music Ensembles <sup>2</sup>
PHIL 123	Ethics
PHIL 170	American Philosophy
PHIL 324	Environmental Ethics
PHIL 371	Ancient Western Philosophy
PHYS 271	Astronomy
POLS 223	Law and Courts
POLS 325	The Congress
POLS 375	Women and Politics
PSYC 105	Introduction to Psychology

**Present**

Select one of the following: 3

ACCT 209	Financial Accounting
ART 345	Foundations of Modern Art
ART 365	Art Since 1945
BIOL 105	Environmental Biology
COMM 458	Media Criticism
ECON 202	Principles of Microeconomics
ECON 312	Critical Choices in Health Care Policy
ENGL 327	Healthcare Writing
EXSC 204	Introduction to Esports
EXSC 250	Medical Terminology
EXSC 305	The Truth About Weight Loss
FIN 100	Personal Financial Planning
GES 324	Environmental Law and Policy
GNDR 415	Feminist Perspectives in the Disciplines
HCAM 230	US Healthcare Systems
HCAM 335	Current Topics in Health Care
INDP 201	Principles of Sociology
INDP 324	The Family
MGMT 351	Organizational Behavior
MRKT 230	Principles of Marketing
NLPA 328	Program Design and Evaluation in Nonprofit and Governmental Organizations
PE 364	Biomechanics of Individuals with Disabilities
PE 393	Nutrition for Physical Activity, Exercise, and Health
PHIL 171	Philosophy of Human Existence
PHIL 261	Philosophy of Art
POLS 101	American National Government
POLS 263	Introduction to Comparative Politics
POLS 351	Politics of Race
THEA 159	Introduction to Theatre Arts Management

**Future**

Select one of the following: 3

ART 105-114	Basic Studio <sup>3</sup>
ART 205-214	Basic Studio <sup>4</sup>
BIOL 300	Social and Ethical Issues in Genetics
CDEV 251	Mental Health in America
CHEM 204	Introduction to Forensic Science
COMM 480	The Communication Age
CPSC 102	Collaborative Information Technology and Society
ECON 201	Principles of Macroeconomics
ECON 315	Economics of Sustainable Development
ENGL 411	Science Fiction
EXSC 304	Current Issues in Esports Health and Society
GES 115	Introduction to Geospatial Technologies
GES 362	Applications in Sustainability
INDP 330	Collective Behavior
LEAD 315	Mindfulness and Brain
MGMT 130	Dynamics of Global Commerce

PCRM 211	Outdoor Leadership
PCRM 342	Group Facilitation and Leadership
PHIL 113	Formal Logic
PHIL 325	Medical/Health Care Ethics
PHIL 351	Philosophy of Natural Science
POLS 364	Using Evidence to Solve Public Problems
PSYC 240	Human Sexual Behavior
SEFE 280	Cultural Minorities in Education
SEFE 401	Education and American Activism
SEFE 420	American Education in the Twenty-First Century: A Comparative Perspective
STAT 152	Elementary Statistics I

**Total Hours** **12**

- <sup>1</sup> Select one ensemble 100/200 level: MUSI 109, MUSI 113, MUSI 114, MUSI 115, MUSI 116, MUSI 117, MUSI 118, MUSI 119, MUSI 120, MUSI 121, MUSI 122, MUSI 123, MUSI 124, MUSI 125, MUSI 126, MUSI 192, MUSI 193, MUSI 194, MUSI 196, MUSI 209, MUSI 213, MUSI 214, MUSI 215, MUSI 216, MUSI 217, MUSI 218, MUSI 219, MUSI 220, MUSI 221, MUSI 222, MUSI 223, MUSI 224, MUSI 225, MUSI 226, MUSI 233, MUSI 237, MUSI 292, MUSI 293, MUSI 294, MUSI 296
- <sup>2</sup> Select one ensemble 300/400 level: MUSI 309, MUSI 313, MUSI 314, MUSI 315, MUSI 316, MUSI 317, MUSI 318, MUSI 319, MUSI 320, MUSI 321, MUSI 322, MUSI 323, MUSI 324, MUSI 325, MUSI 326, MUSI 392, MUSI 393, MUSI 395, MUSI 416, MUSI 417, MUSI 418, MUSI 419, MUSI 420, MUSI 421, MUSI 422, MUSI 423, MUSI 424, MUSI 425, MUSI 426, MUSI 437, MUSI 492, MUSI 493, MUSI 494, MUSI 496
- <sup>3</sup> Select one from: ART 105, ART 106, ART 107, ART 108, ART 109, ART 110, ART 111, ART 112, ART 113, ART 114
- <sup>4</sup> Select one from: ART 205, ART 206, ART 207, ART 208, ART 209, ART 210, ART 211, ART 212, ART 213, ART 214
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Institutions and Human Innovations Thematic Thread (IHI)

Revised 10.13.2022

UCC: 10.11.2022

## The United States in Global Context

This thread examines the United States as a nation within a global context. Courses will expose students to the global influences on American arts, culture, and sciences, and offer a deeper understanding and appreciation of American civics, citizenship, and international

heritage. Courses will examine major political and economic forces that shape America's relationships with its allies and adversaries and allow students to explore the challenges and opportunities of a globalized world.

## CURRICULUM GUIDE

Code	Title	Hours
Select one of the following:		3
ARAB 101	Arabic Language and Culture I	
ARAB 102	Arabic Language and Culture II	
ARAB 103	Arabic Language and Culture III	
ARAB 215	Topics in Arabic Culture	
ART 226	Overview of World Art	
COMM 405	Global Media	
CRIM 327	Criminal Justice and the Multicultural Community	
CRIM 328	Transnational Crime & Justice	
DANC 318	Dance in the Political World	
ECON 201	Principles of Macroeconomics	
ENGL 246	U.S. Latino/a Literatures	
FREN 101	French Language and Culture I	
FREN 102	French Language and Culture II	
FREN 103	French Language and Culture III	
FREN 215	Topics in French and Francophone Culture	
FREN 306	France and Francophone Identities Today	
GES 303	Asia	
GES 324	Environmental Law and Policy	
HCAM 300	Healthcare Systems: Global Perspectives and Analysis	
HIST 152	Early Modern to Contemporary World	
HIST 406	Mass Killing and Genocide in the Modern World	
INDP 202	Introduction to Anthropology	
INDP 310	Cultural Area Studies	
JAPN 101	Japanese Language and Culture I	
JAPN 102	Japanese Language and Culture II	
JAPN 103	Japanese Language and Culture III	
JAPN 215	Topics in Japanese Culture	
MGMT 130	Dynamics of Global Commerce	
MRKT 303	Issues in Global Business	
MUSI 102	Exploring World Music	
PHIL 140	World Religions	
PHIL 171	Philosophy of Human Existence	
PHIL 326	Business Ethics	
PHIL 371	Ancient Western Philosophy	
PHIL 371	Ancient Western Philosophy	
POLS 103	International Relations	
POLS 263	Introduction to Comparative Politics	
POLS 350	Transnational Terrorism	
SPAN 101	Spanish Language & Culture I	
SPAN 102	Spanish Language & Culture II	
SPAN 103	Spanish Language & Culture III	

SPAN 215	Topics in Hispanic Culture
<b>Past</b>	
Select one of the following:	
ART 225	Overview of Western Art
COMM 419	Propaganda: Ideology, Communication Warfare, and Social Control
ECON 326	International Economics
ENGL 220	Introduction to Literary and Cultural Studies
ENGL 316	Asian Film
HIST 201	Colonial US to the Civil War Era
HIST 202	US Civil War Era to Present
HIST 306	Russia Since 1855
HIST 326	The Long Civil Rights Movement
HIST 337	Native American History
HIST 346	Rise of Imperial Britain
HIST 352	Latin America Since 1830
HIST 353	History of the Americas
HIST 453	American Constitutional History and Law
HLTH 311	International Health
INDP 201	Principles of Sociology
INDP 212	Archaeology/World Prehistory
MODL 105	Introduction to Asian Civilizations
MS 100	The American Military Experience
PHIL 101	Introduction to Philosophy
PHIL 335	Philosophy of Law and Justice
POLS 220	Foreign Policy
POLS 301	Organized Political Action
POLS 322	The United Nations and International Law
THEA 359	Studies in Audience Development
<b>Present</b>	
Select one of the following:	
ART 365	Art Since 1945
COMM 480	The Communication Age
CRIM 302	Sexual Violence
ECON 312	Critical Choices in Health Care Policy
EGEO 100	Environmental Geology
ELEC 410	Culture and Politics of American Education
ENGL 327	Healthcare Writing
GES 135	Introduction to Environmental Problems
GES 344	Environmental Justice
GNDR 415	Feminist Perspectives in the Disciplines
HCAM 275	Health Care Legal & Ethical Foundations
HCAM 335	Current Topics in Health Care
INDP 226	Population and Society
INDP 321	Minority Groups
INDP 326	Society, Culture and Self
LEAD 350	Multicultural Leadership
MGMT 351	Organizational Behavior
MRKT 230	Principles of Marketing
NLPA 220	Introduction to Nonprofit Management
PHIL 113	Formal Logic

PHIL 123	Ethics
POLS 101	American National Government
POLS 303	Seminar in Democracy
POLS 333	The Political Film
POLS 367	National and International Security: Problems and Issues
POLS 369	Politics of Developing Areas
PSYC 205	Environmental Psychology
SEFE 401	Education and American Activism
SPAN 121	Spanish for Health Professionals
<b>Future</b>	
Select one of the following:	
BIOL 105	Environmental Biology
BIOL 300	Social and Ethical Issues in Genetics
CDEV 251	Mental Health in America
COMM 263	Mass Media and Society
CPSC 300	Challenges of Computer Technology
CYBR 101	Cybersecurity in the Era of Evolving Technology
ECON 202	Principles of Microeconomics
ECON 315	Economics of Sustainable Development
EGEO 131	Oceanography
EXSC 230	Stress Management
EXSC 304	Current Issues in Esports Health and Society
GES 115	Introduction to Geospatial Technologies
GES 355	Earth's Changing Climate
GES 361	Gender and the Environment
HEMT 114	Sustainability in Food and Hospitality
HEMT 210	Contemporary Travel and Tourism
INDP 309	Health and Society
MGMT 370	Sustainable Entrepreneurship and Innovation
PCRM 104	Foundations in Sustainability
PHIL 324	Environmental Ethics
PHIL 325	Medical/Health Care Ethics
PHIL 338	Ethics, Technology, and the Future
POLS 365	International Political Economy

**Total Hours** 12

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

The United States in Global Context Thematic Thread (USGC)

Revised 07.01.2022

UCC: 04.19.2022

## Rock Studies 2 Quick Guide

### Rock Studies 2 Quick Guide

The Rock Studies Program at Slippery Rock University is the general education requirements for all academic majors for incoming freshman. Since some majors prescribe specific courses within each category, student should use this guide along with the curriculum guide and the My Rock Audit to make course selections in consultation with their adviser.

## The Rock (15 Credits)

### The Rock (15 Credits)

Code	Title	Hours
SUBJ 139	Foundations of Academic Discovery	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	

## Integrated Inquiry (15 Credits)

### Creative and Aesthetic Inquiry (3 Credits)

Code	Title	Hours
ART 130	Visual Art Inquiry	3
DANC 130	Dance: Art and Culture	3
MUSI 130	Exploring Music	3
THEA 130	Art of Theatre	3

### Humanities Inquiry (3 Credits)

Code	Title	Hours
ENGL 180	Society on the Screen	3
GNDR 180	Disability and Social Justice	3
HIST 180	Spotlight on the Past	3
MODL 180	Introduction to World Cultures	3
PHIL 180	Philosophical Inquiry	3

### Social Science Inquiry (3 Credits)

Code	Title	Hours
COMM 170	Communicology	3
CRIM 170	Crime: Why Do We Do It?	3
GES 170	Discover Geography	3
HSS 170	Lenses of Catastrophe	3
INDP 170	Making Sense of Our Social World	3
PE 168	Physical Activity and Wellbeing in Society	3
POLS 170	Investigating Politics	3
SOWK 170	Cultural Competence and Social Change	3

## Natural Sciences Inquiry (3 Credits)

Code	Title	Hours
SCI 101	Science of Life	3

## Physical Sciences Inquiry (3 Credits)

Code	Title	Hours
SCI 102	Understanding the Physical World	3

## Thematic Threads (12 Credits)

### Thematic Threads (12 Credits)

- Students should declare a thread in consultation with their academic adviser.
- Select 12 credits including one course from each category; 6 credits must be 300-level or above; no more than 4 credits from on subject area
- Thematic Thread Categories:
  - World
  - Past
  - Present
  - Future

### Available Thematic Threads

To view a listing of all available Thematic Threads, visit the Thematic Threads (p. ) page

## College of Business

### Dean's Office Staff

#### Dr. Lawrence Shao

Dean, College of Business

Phone: 724.738.2008

Email: lawrence.shao@sru.edu

#### Mr. Larry J. McCarthy

Assistant to the Dean

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Email: larry.mccarthy@sru.edu

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Clerical Assistant 3

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## Departments

- Accounting, Economics, and Finance (p. 30)
- Government Contracting Assistance Center (GCAC) (p. 57)
- Information Systems and Technology Management (p. 57)
- Management and Marketing (p. 66)
- Military Science (Army ROTC) (p. 96)
- Safety Management (p. 99)
- Sport Management, Hospitality and Tourism (p. 106)
- Strategic Communication and Media (p. 121)

# Accounting, Economics, and Finance

Chair	Secretary	Location	Department Phone
Dr. Melanie Anderson	Teresa Aspinall	110 Eisenberg Classroom Building	724-738-4865

Department Web Site URL (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/accounting-economics-and-finance/>)

Accounting Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/FS-Accounting.pdf>)

Economics Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/FS-Economics.pdf>)

Finance Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/FS-Finance.pdf>)

## The Rock Difference

The Department of Accounting, Economics and Finance offers a Bachelor of Science in Business Administration (BSBA) with majors in Accounting, Economics and Finance.

The Department offers a Master of Accountancy (MAcc) degree. Students can complete this graduate degree in one year, or can select the 4 + 1 option as an accounting undergraduate to complete the BSBA/MAcc in 5 years.

## Our Vision

We will provide transformational education experiences that equip students to be lifelong learners who engage the world as knowledgeable, principle centered and responsible global citizens.

## Our Mission

The School of Business at Slippery Rock University prepares students to be career ready emerging leaders by developing competencies for success professionally and personally. Our academic programs are student centered with high levels of engagement in an environment where faculty scholarship enhances student learning. The School of Business also serves as a catalyst for regional economic development through outreach and partnerships.

## Accreditation

The BSBA programs, MAcc program, and MBA program are accredited by the Association to Advance Collegiate Schools of Business - AACSB accreditation.

## Faculty

### Melanie Anderson

Professor  
Accounting,Economics & Finance  
Ph.D., University of Nebraska-Lincoln  
M.B.A., Pennsylvania State University  
B.S., Clarion University

### Lua Augustin

Associate Professor  
Accounting,Economics & Finance  
Ph.D., Texas Tech University  
M.Ed., Lamar University

M.B.A., Midwestern State University  
B.B.A., Midwestern State University

### Thuy Bui

Associate Professor  
Accounting,Economics & Finance  
M.B.A., Ohio University  
B.B.A., Ohio University

### Baizhou Chen

Instructor  
Accounting,Economics & Finance  
M.B.A., St. John's University  
B.S., University of Minnesota

### Jeffrey Forrest

Professor  
Accounting,Economics & Finance  
Ph.D., Auburn University  
M.S., Northwestern University (China)  
B.S., Northwestern University (China)

### John Golden

Assistant Professor  
Accounting,Economics & Finance  
J.D., Duquesne University School of Law  
B.A., California University of Pennsylvania

### Benjamas Jirasakuldech

Professor  
Accounting,Economics & Finance  
Ph.D., University of Nebraska-Lincoln  
M.S., Texas Tech University  
B.A., Assumption University (Thailand)

### Yi Li

Associate Professor  
Accounting,Economics & Finance  
B.A., Renim University of China  
B.S., Renim University of China

### Larry McCarthy

Assistant Professor  
Accounting,Economics & Finance  
M.B.A., University of Pittsburgh  
C.P.A., University of Pittsburgh  
B.S., Slippery Rock University

### Sunita Mondal

Professor  
Accounting,Economics & Finance  
Ph.D., University of Pittsburgh  
M.A., Jadavpur University (India)  
B.A., Jadavpur University (India)

### Donald Mong

Associate Professor  
Accounting,Economics & Finance  
J.D., University of Pittsburgh  
M.B.A., University of Pittsburgh  
B.A., Haverford College

### Theresa Phipps

Associate Professor



Accounting, Economics & Finance  
M.B.A., Wheeling Jesuit University  
B.S., Wheeling Jesuit University

#### **Edward Scott**

Professor

Accounting, Economics & Finance  
M.B.A., Texas Christian University  
B.S., Point Park University

#### **Pavani Tallapally**

Associate Professor

Accounting, Economics & Finance  
Ph.D., Louisiana Tech University  
M.B.A., Indiana University  
B.A., Osmania University

#### **Xintong Wang**

Assistant Professor

Accounting, Economics & Finance  
Ph.D., SUNY at Binghamton  
M.A., SUNY at Binghamton  
B.A., Nankai University

## **Programs**

### **Majors**

- Accounting Online, Bachelor of Science in Business Administration (BSBA) (p. 41)
- Accounting, Bachelor of Science in Business Administration (BSBA) (p. 43)
- Economics, Bachelor of Science in Business Administration (BSBA) (p. 48)
- Finance, Bachelor of Science in Business Administration (BSBA) (p. 53)

### **Minors**

- Accounting, Minor (for BSBA and HCAM students only) (p. 47)
- Business Analytics, Minor (p. 48)
- Economics, Minor (BSBA Majors Only) (p. 52)
- Economics, Minor (Non BSBA Majors) (p. 52)
- Finance, Minor (for BSBA and HCAM students only) (p. 56)

### **Certificates**

- Accounting, Certificate (p. 46)

## **Courses**

### **ACCT Courses**

#### **ACCT 101 - Taxes in America**

In America, our income is taxed when we earn it and when we spend it. Our property is taxed when we own it and sometimes even when we give it away! We pay taxes to our local, state, and federal governments. Learn where you tax dollars go, how they are used, and how you influence tax legislation. Evaluate how our taxes affect diverse populations in American society.

Credits: 3

Term(s) Typically Offered: Offered Summer & Winter Terms

#### **ACCT 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

#### **ACCT 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

#### **ACCT 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

#### **ACCT 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

#### **ACCT 209 - Financial Accounting**

A study of accounting concepts and principles that govern the recording, processing, and reporting of accounting information. The significance of the financial statements and the analysis of accounting information for investors, creditors, and other external users in the decision making process is emphasized.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Cultural Literacy & Community Building, Institutions & Human Innovations, Transfer Thread Completion Course

#### **ACCT 210 - Managerial Accounting**

A study of accounting concepts and procedures used for cost analysis, cost allocation, planning, and reporting accounting information with an internal perspective. The significance of accounting information and the financial statements for management's decision-making process is emphasized.

Prerequisite: ACCT 209<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

**ACCT 230 - Accounting Information Systems**

Designing effective accounting information systems to generate reliable accounting information is the focus of the course. The significance of accounting information, transaction cycles, systems controls, document flowcharts, and accounting software are emphasized.

Prerequisites: ACCT 209<sup>C</sup> and (CPSC 210<sup>D</sup> or MIS 210<sup>D</sup>)

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Every Term

**ACCT 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ACCT 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**ACCT 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ACCT 308 - Federal Individual Income Tax**

Study of the federal income tax system, individual returns, rates, income exclusions and inclusions, gains and losses, deductions, alternate tax methods, and withholding of taxes. Prerequisite: Advanced business standing.

Prerequisite: ACCT 209<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 310 - Cost Accounting**

A study of control concepts and costing methods including systems for management control, inventory valuation, cost-volume-profit analysis, standard variance analysis, budgeting, decision models, product cost accumulation, and quantitative methods in cost analysis.

Prerequisites: ACCT 209<sup>C</sup> and (ECON 219<sup>D</sup> or MGMT 219<sup>D</sup>)

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 311 - Federal Corporate and Transfer Taxes**

Corporate, partnership, estate and trust taxation are covered along with topics such as depletion, net operating losses, and installment and deferred payment sale.

Prerequisite: ACCT 308<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 313 - Intermediate Accounting I**

An examination of accounting principles and the study of the foundations of accounting theory and practice. Emphasis is placed on the conceptual framework of accounting and the development of generally accepted accounting principles including the FASB Codification, SEC, IASB, and other standards setting bodies; time value of money concepts, accounting for stockholders' equity and the presentation of the balance sheet and income statement. Ethical issues and concerns are stressed throughout the course.

Prerequisites: ACCT 209<sup>C</sup> and ACCT 230<sup>C</sup> and ECON 202<sup>D</sup> and (ECON 219<sup>D</sup> or MGMT 219<sup>D</sup>)

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 314 - Intermediate Accounting II**

A continuation of ACCT 313 covering the detailed examination and application of generally accepted accounting procedures in accounting for stockholders' equity: contributed capital and retained earnings; revenue and expense determination, recognition, and measurement with particular emphasis on pensions, leases, and deferred taxes. Ethical issues and concerns are stressed throughout the course.

Prerequisite: ACCT 313<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 315 - Intermediate Accounting III**

A continuation of ACCT 313 covering the detailed examination and application of generally accepted accounting principles in accounting for stockholders' equity issues: revenue recognition, pensions, leases, deferred taxes, share based compensation, EPS, accounting changes and error corrections; and the cash flow statement. Ethical issues and concerns are stressed throughout the course.

Prerequisite: ACCT 314<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 320 - Forensic Accounting**

Forensic Accounting as an accounting field of study has surged with the high profile corporate misappropriation of assets/financial statement manipulation and fraud situations over the last 20 years. White collar fraud and the resulting increased legislation has heightened awareness of fraud and increased the need for accountants with forensic accounting skills. Certifications such as the Certified Fraud Examiner (CFE) now increasingly sought after by practitioners and students. ACCT 320 is dual listed as ACCT 620.

Prerequisites: ACCT 209<sup>C</sup> and ACCT 313<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 322 - Business Analysis and Decision Making**

This course acquaints students with the process used to construct and understand the financial reports of organizations. An important objective is to understand the decisions that must be made in the financial reporting process and to develop the ability to evaluate and use accounting data. Included in the content are a study of accounting concepts and procedures used for financial statement analysis, cost analysis, cost allocation, planning and reporting accounting information. The significance of accounting information and the financial statements for management's decision-making process is emphasized.

Prerequisite: ACCT 209<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 324 - Cost Accounting II**

This course is a continuation of Cost Accounting, ACCT 310. This course covers breakeven analysis, activity based costing, inventory management, differential analysis, transfer pricing, product pricing, capital planning, cost centers, the balanced scorecard, and decision making under uncertainty.

Prerequisite: ACCT 310<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 340 - Legal Environment of Business**

A study of the various processes available to resolve business disputes and an exploration of complex legal relationships that affect business, including contracts, business formations, employment, and torts and consumer law.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 341 - Legal Environment of Business II**

An analysis of complex transactions including mergers and acquisitions, antitrust law, financial instruments, intellectual property, bankruptcy, environmental, estate and international law.

Prerequisite: ACCT 340<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 345 - Volunteer Income Tax Assistance (VITA)**

The focus of this class is service learning. The students will be afforded the opportunity to receive IRS certification as a tax preparer while making a difference in their community. Students will prepare annual federal and state income tax return for low income individuals that qualify for the Volunteer Income Tax Assistance (VITA) Program. Students must pass an IRS certification exam and receive training on the Tax software. All Individual tax returns prepared as part of this class will be detailed reviewed prior to filing the tax. Students will develop and enhance a number of soft skills such as problem solving, teamwork, critical thinking, and leadership, each of which is valuable to entry-level accounting and business professionals.

Prerequisite: ACCT 308 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Enrollment limited to students with a semester level of Junior 2, Post Baccalaureate, Senior 1 or Senior 2.

Enrollment limited to students in the College of Business college.

Enrollment limited to students with department of Accounting, Economics & Finance.

**ACCT 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 400 - Legal Environment of Healthcare**

Legal Environment of Healthcare acquaints future healthcare managers with legal issues relating to government, patients, healthcare employees, and contractors. This course surveys a wide variety of legal concepts, terms, and common-sense tips for entry-level healthcare organization employees.

Prerequisites: HCAM 230<sup>C</sup> and HCAM 275<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even, Offered Spring Terms, Offered Winter Terms Odd

**ACCT 411 - Auditing Theory and Practice**

Objective examination of financial statements with emphasis on internal control, review and evaluation, sampling theory and application, and procedural testing.

Prerequisite: ACCT 315<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 412 - Accounting Seminar**

Analysis of current accounting theory and application in practice. Additional focus on ethics, written and oral communication, organization skills, professionalism, and current topics.

Prerequisite: ACCT 314<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 413 - Advanced Accounting**

In this course, advanced accounting concepts and procedures affecting partnerships, governmental entities, not-for-profit organizations, estates, and trusts are presented. Diverse global accounting issues, diversity in application of generally accepted accounting standards (GAAP), and the harmonization of GAAP in the development of international financial reporting standards (IRFS) as it applies to business combinations, consolidations, and transactions between international entities are highlighted.

Prerequisite: ACCT 315<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 419 - Auditing Systems**

Continuation of ACCT 411 with emphasis on computerized accounting systems and auditing procedures.

Prerequisite: ACCT 411<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 423 - Advanced Accounting II**

This course is a continuation of Advanced Accounting, ACCT 413. Covers various topics, with emphasis on not-for-profit accounting (government, education, hospitals, and volunteer organizations), fiduciary accounting (estates, trusts, and insolvent companies), and advanced financial statement presentations (interim reporting, foreign currency, and segment reporting). Related pronouncements from the Financial Accounting Standards Board and the Governmental Accounting Standards Board will also be introduced.

Prerequisite: ACCT 413<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

**ACCT 429 - Accounting Data Analytics**

Analysis of data for accounting and finance applications. Focus on accounting data analysis concepts and techniques for decisions making and the use of large data sets involving accounting information. Development of analysis and problem solving skills using current software tools available to accounting professionals. ACCT 429 is dual listed as ACCT 629.

Prerequisite: ACCT 230<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

**ACCT 450 - Internship**

Supervised placement in selected public and private agencies at appropriate institutions. Prerequisites: Application and permission of the instructor. It is recommended that this be taken as a 3 credit internship.

Credits: 1-12

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 451 - Employment Law**

This course covers the law as it applies to all aspects of the employer - employee relation, including union activity, discrimination, selection, testing and employment contracts.

Prerequisites: MGMT 351<sup>D</sup> or MGMT 250<sup>D</sup> or MGMT 251<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 490 - Independent Study**

In-depth reading and/or research in an area of particular interest to the student, done with the guidance of a faculty member. Prerequisites: 12 credits of accounting courses, application, and permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ECON Courses****ECON 105 - Economics of Social Issues**

As an introductory course, it is intended to provide an understanding of how our economic system works. It examines the forces that determine what, how much and who obtains the outputs of the economy, and explains the issues behind current economic problems. A framework of building blocks from micro, macro, and international economics is developed to enable students to comprehend the differences among alternative solutions and to understand the implications of policy issues constantly confronting a mixed dynamic economy.

Credits: 3

Term(s) Typically Offered: Offered Winter, Spring&Summer

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course

**ECON 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**ECON 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ECON 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**ECON 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ECON 201 - Principles of Macroeconomics**

Definition of economics; concepts and institutions; demand, supply and the price system; national income; employment and fiscal policy; monetary policy; economic stability and growth.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

**ECON 202 - Principles of Microeconomics**

Economics of the firm; resource allocation; price and output determination; market structure; current economic problems; international economics.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context



**ECON 211 - Real Estate Finance**

The study of nature and scope of real estate, factors affecting demand and supply, property rights, title, deeds and title closing, sources of financing, real estate valuation, taxes, leveraged buy-outs, and real estate investment decision.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**ECON 219 - Business Analytics I**

Probability and statistics in a business environment encompassing descriptive statistics, probability theory, hypothesis testing, linear regression and correlation. Prerequisites: Algebraic proficiency and microcomputer proficiency. Cross-listed as MGMT 219.

Credits: 3

Term(s) Typically Offered: Offered Every Term

**ECON 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ECON 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**ECON 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ECON 301 - Macroeconomic Analysis**

Determination of national income and employment. National income accounts as measures of aggregate economic behavior. Analysis of income stability, unemployment, inflation and growth.

Prerequisites: ECON 201<sup>D</sup> and ECON 202<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ECON 302 - Microeconomic Analysis**

Intermediate price theory including theories of demand, supply, production, resource allocation, market structure, general equilibrium and risk analysis.

Prerequisites: ECON 201<sup>D</sup> and ECON 202<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ECON 304 - Money and Banking**

Emphasis is upon monetary policy, how it is implemented, the theories on which it is based, and the implication of this policy on our economy.

Prerequisite: ECON 201<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ECON 312 - Critical Choices in Health Care Policy**

This course analyzes the health care sector. It presents reasons for the growth in health care expenses, assesses how and why they are likely to grow, and details policy options that confront health care administrators, consumers, employers, and government officials.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ECON 315 - Economics of Sustainable Development**

Economic causes and effects of pollution are discussed along with the issue of sustainable economic development. government policy with respect to the environment and renewable energy will be surveyed. The framework connection between sustainability and the core functions of business for profit in the global economy will be presented.

Prerequisite: ECON 202<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ECON 318 - Introduction to Econometrics**

Economic and statistical analysis encompassing multiple regression methods, economic and statistical decision analysis, and advanced forecasting techniques.

Prerequisites: ECON 219<sup>D</sup> or MGMT 219<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ECON 319 - Business Analytics II**

This course introduces various methods on how to analyze large sets of business data in order to uncover potential business opportunities. Students will learn both predictive analytics and prescriptive analytics. The predictive analytics include trend analysis, forecasting techniques, data mining, and spreadsheet modeling. Prescriptive analytics covers linear optimization and decision analysis. Business software such as productivity software, data visualization, and business intelligence software will be heavily used as a main focus of learning.

Prerequisites: (ECON 219<sup>D</sup> or MGMT 219<sup>D</sup> or STAT 152<sup>D</sup>) and (MATH 113<sup>D</sup> or MATH 115<sup>D</sup> or MATH 117<sup>D</sup> or MATH 118<sup>D</sup> or MATH 122<sup>D</sup> or MATH 123<sup>D</sup> or MATH 125<sup>D</sup> or MATH 131<sup>D</sup> or MATH 210<sup>D</sup> or MATH 225<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

**ECON 324 - Game Theory, Behavioral and Experimental Economics**

This is an upper division undergraduate course, focused on Behavioral Economics, Game Theory and Experimental Economics. Behavioral economics and experimental economics are relatively new fields in which decision making is examined in a controlled laboratory/field setting. The data from these experiments are used to evaluate theories as well as to test and fine tune policies that could not be easily tested with naturally occurring data. The range of applications for experimental research is broad (and growing) and includes fields such as behavioral economics, public economics, industrial organization and regulation, environmental economics, game theory, and bargaining. This course surveys research in many of these fields and provides a basic framework for designing and conducting experiments. In this sense the course fulfills two objectives: to encourage students to think about the empirical and policy implications of the economic theories taught in other classes and to teach skills that may be used to conduct empirical analysis (using laboratory and field experiments data).

Prerequisite: ECON 202<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

**ECON 326 - International Economics**

Alternative exchange rate systems, commercial trade policies, balance of payments, adjustment mechanisms and the role of international financial organizations.

Prerequisites: ECON 201<sup>D</sup> and ECON 202<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ECON 360 - Labor Economics**

An investigation of labor markets and the effect of institutional forces on employment, wage determination, stability, and the availability of labor.

Prerequisite: ECON 202<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ECON 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ECON 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ECON 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ECON 450 - Internship**

Supervised placement and research in selected public and private agencies at appropriate institutions. Course can be taken for 1-12 credits, 3 credits are recommended.

Prerequisites: ECON 201<sup>D</sup> and ECON 202<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-12

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ECON 490 - Independent Study**

In-depth reading and/or research in an area of particular interest to the student, with the guidance of a faculty member. Prerequisites: 12 hours of major courses, application, and permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ECON 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ECON 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN Courses****FIN 100 - Personal Financial Planning**

All individuals encounter challenging financial decisions. This course will introduce a wide variety of topics, such as cash and debt management, credit rating, insurance policies, housing decisions, taxes, investments, retirement, and estate planning. In addition, students will apply financial planning principles to diverse populations.

Credits: 3

Term(s) Typically Offered: Offered Winter, Spring&Summer

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

**FIN 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**FIN 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**FIN 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**FIN 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**FIN 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**FIN 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**FIN 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**FIN 303 - Issues in Global Business**

This course will focus on fundamental issues in the modern globalization of business. The topics covered will include the cultural environments in which business work, politics and law in global business, economic integration, global trade and investment, global finance, global operations and managing global businesses. A special emphasis will be placed on the challenges and opportunities presented to global businesses by the social, political and economic diversity encountered in the global marketplace.

Prerequisites: ECON 201<sup>D</sup> and ECON 202<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 304 - Money and Banking**

Emphasis is upon monetary policy, how it is implemented, the theories on which it is based, and the implication of this policy on our economy.

Prerequisite: ECON 201<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 318 - Intermediate Statistical Analysis**

Statistical analysis encompassing multiple regression and correlation, ANOVA (simple and multivariate), goodness of fit, statistical decision analysis, and advanced forecasting techniques.

Prerequisites: ECON 219<sup>D</sup> or MGMT 219<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 320 - Managerial Finance**

Capital budgeting, cost of capital, management of short and long term assets, mergers and financial reorganization.

Prerequisite: ACCT 209<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall, Winter, & Spring

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 321 - Investments**

Introduction to security markets and their operation; investment alternatives; fundamentals of investment analysis.

Prerequisite: FIN 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 322 - Bank Financial Management**

Principles of bank financial management including sources and uses of funds and the role of the bank in financial markets.

Prerequisite: FIN 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 323 - Financial Markets and Institutions**

Introduction to financial markets and institutions and to their role in financing business, consumers and government.

Prerequisite: FIN 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall, Winter, & Spring

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 326 - Intermediate Corporate Finance**

This course provides in-depth analysis of topics addressed in corporate finance and covers additional advanced topics including but not limited to real asset valuation, corporate governance, short-term financial management, and mergers and acquisitions.

Prerequisite: FIN 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 329 - Principles of Insurance**

A study of the basic principles of insurance and risk. Topics include property and liability insurance; the financial structure and organization of insurance business, and the different fields of insurance.

Prerequisite: FIN 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 340 - Real Estate Investment**

The study of the nature and scope of real estate investment, investment decision process and investment strategy, financial and risk analysis, tax implications, institutional real estate investment and real estate investment trust funds.

Prerequisite: FIN 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 341 - Entrepreneurial Finance**

Entrepreneurial finance is the application and adaptation of financial tools and techniques to the planning, funding, operation, valuation and harvesting of entrepreneurial ventures.

Prerequisite: FIN 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 409 - Retirement and Estate Planning**

In-depth study of the tools and techniques available for use in retirement and estate planning from a personal financial planning perspective. Particular emphasis will be given to retirement cash flow analysis and planning as well as the transfer tax system inherent in estate planning and the methods available for estate management.

Prerequisites: FIN 321<sup>D</sup> and FIN 329<sup>D</sup> and ACCT 308<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 410 - Personal Financial Planning Seminar**

Synthesize the topics requisite to expertise in personal financial planning as explored principally through case studies. These topics include risk management, investment, insurance and tax planning, and retirement and estate planning.

Prerequisites: FIN 321<sup>D</sup> and FIN 329<sup>D</sup> and ACCT 308<sup>D</sup> and FIN 409<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 420 - Finance Seminar**

Capital budgeting, cost of capital, capital structure, working capital management and long-term financing.

Prerequisite: FIN 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 421 - Portfolio Theory**

Advanced treatment of investment concepts. In-depth analysis of Modern Portfolio Theory, Capital Asset Pricing Model (CAPM) and its extensions, options, interest options, future markets and precious metals.

Prerequisite: FIN 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 427 - International Financial Management**

International monetary systems, sources of funds, import and export financing; taxation of multinational corporations, foreign investment decisions; political risk; risk of foreign exchange losses; management of working capital.

Prerequisite: FIN 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 430 - International Banking**

Internationalization of U.S. and foreign banks to meet the global financial needs of multi-national activities.

Prerequisites: FIN 320<sup>D</sup> and FIN 323<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**FIN 450 - Internship**

Supervised placement and research in selected public and private agencies at appropriate institutions. Course listed as 1-12 credits, 3 credits are recommended.

Credits: 1-12

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 490 - Independent Study**

In-depth reading and/or research in an area of particular interest to the student, done with the guidance of a faculty member. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Accounting Online, Bachelor of Science in Business Administration (BSBA)

### Program Learning Outcomes

- **Communication:** Students graduating with a degree in business administration will demonstrate competency in oral and written communication skills. Students will:
  - Prepare in proper format and style the following documents: business report (one to two pages), business memo, research report and presentation.
  - Deliver an effective oral presentation on a business and/or professional topic.
- **Critical Thinking and Problem Solving:** Students graduating with a degree in business administration will demonstrate effective critical thinking and problem solving skills. Students will:
  - Apply critical thinking skills to analyze and interpret financial statements to judge business performance.

- Apply critical thinking skills using quantitative techniques for problem solving and strategic decision making.

- **Degree Program Writing Competency:** Students will create written business and professional documents in appropriate style and format.

- **Ethics:** Students graduating with a degree in business administration will have acquired the necessary skills and knowledge to meet professional competencies as business professionals and global citizens. Students will demonstrate:

- An understanding of the history and vocabulary unique to business disciplines.
- Knowledge of procedures, concepts, and technical business skills through practical application (forecasting, budgeting, financial statement analyses, business plans, strategic planning).
- The ability to read and interpret financial statements in the decision-making process.
- Effective team work and collaborative skills in a simulated business environment.

- **Information Technology:** Students will demonstrate proficiency in the use of computers and software to manage information with statistical analysis, spreadsheet, database and other appropriate applications.

- **Professional Proficiency:** Students graduating with a degree in business administration will have acquired the necessary skills and knowledge to meet professional competencies as business professionals and global citizens. Students will demonstrate:

- An understanding of the history and vocabulary unique to accounting disciplines.
- Knowledge of procedures, concepts, and technical accounting business skills through practical application (forecasting, budgeting, financial statement analyses, business plans, strategic planning).
- The ability to read and interpret financial statements in the decision-making process.
- Effective team work and collaborative skills in a simulated business environment.

### Related Links

Accounting Online, BSBA Program Page (<https://www.sru.edu/academics/majors-and-minors/accounting/>)

Accounting, Economics and Finance Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/accounting-economics-and-finance/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

### Curriculum Guide

#### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

Core GPA: 2.0 or higher

## Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	72
	Electives	6

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Students must complete a sum total of 42 SRU Rock Studies 2-based credits. There are no specific requirements.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
	Complete one of the following:	0-3
	Meet required minimum SAT or ACT math score OR	
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
	Demonstrate "computer competency" by one of the following:	0-3
	Pass Computer Competency Exam OR	
	Select one of the following at SRU or another post-secondary institution:	
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 36 major credits must be taken at SRU or PASSHE
- 36 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Business Administration Core Requirements</b>		
ACCT 209	Financial Accounting <sup>1</sup>	3
ACCT 230	Accounting Information Systems <sup>2</sup>	3
ACCT 310	Cost Accounting (Accounting Majors) <sup>1</sup>	3
ACCT 340	Legal Environment of Business <sup>1</sup>	3

ECON 201	Principles of Macroeconomics <sup>1</sup>	3
ECON 202	Principles of Microeconomics <sup>1</sup>	3
ECON 219	Business Analytics I <sup>1</sup>	3
or MGMT 219	Business Analytics I	
ECON 319	Business Analytics II <sup>1</sup>	3
or MGMT 319	Business Analytics II	
FIN 303	Issues in Global Business <sup>1</sup>	3
or MGMT 303	Issues in Global Business	
or MRKT 303	Issues in Global Business	
FIN 320	Managerial Finance <sup>1</sup>	3
MGMT 320	Operations Management <sup>1</sup>	3
MGMT 351	Organizational Behavior <sup>1</sup>	3
MGMT 458	Business Capstone <sup>1</sup>	3
MRKT 230	Principles of Marketing <sup>1</sup>	3
<b>Subtotal</b>		<b>42</b>

### Required Computer Science Course

CPSC 210	Productivity Software <sup>1</sup>	3
or MIS 210	Productivity Software	
<b>Subtotal</b>		<b>3</b>

### Required Accounting Courses

ACCT 308	Federal Individual Income Tax <sup>2</sup>	3
ACCT 313	Intermediate Accounting I <sup>2</sup>	3
ACCT 314	Intermediate Accounting II <sup>2</sup>	3
ACCT 315	Intermediate Accounting III <sup>2</sup>	3
ACCT 411	Auditing Theory and Practice <sup>2</sup>	3
ACCT 413	Advanced Accounting <sup>2</sup>	3
ACCT 345	Volunteer Income Tax Assistance (VITA)	3
or ACCT 450	Internship	
<b>Subtotal</b>		<b>21</b>

### Electives

Select two of the following:		6
ACCT 311	Federal Corporate and Transfer Taxes <sup>2</sup>	
ACCT 320	Forensic Accounting <sup>2</sup>	
ACCT 324	Cost Accounting II <sup>2</sup>	
ACCT 412	Accounting Seminar <sup>2</sup>	
ACCT 419	Auditing Systems <sup>2</sup>	
ACCT 423	Advanced Accounting II <sup>2</sup>	
ACCT 429	Accounting Data Analytics <sup>2</sup>	
ACCT 450	Internship <sup>2</sup>	
<b>Subtotal</b>		<b>6</b>
<b>Total Hours</b>		<b>72</b>

<sup>1</sup> Course counts for 50% of Major and not for Major GPA

<sup>2</sup> Course counts for 50% of Major and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-Curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. These opportunities can deepen and enhance the learning in accounting, economics and finance. In addition, there is a strong

correlation between long-term student success and engagement in these opportunities:

1. Internships
2. Participation in student organizations
3. International study programs (short-term, semester, and year-long)
4. High-Impact Practice (HIP) designated classes
5. Student-faculty research
6. Student leadership development
7. Service-learning classes
8. Career education and development

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

ACCOUNTING - BSBA (2339)

This program is effective as of Spring 2020.

Revised 07.06.2022

UCC 03.22.2022

## Accounting, Bachelor of Science in Business Administration (BSBA)

The Accounting program at Slippery Rock University prepares students for success in the challenging and rewarding field of accounting. The integrated curriculum focuses on the development of students' business and accounting skills and knowledge while enhancing their communication, teamwork, critical thinking, and problem solving skills as well as technological proficiency. Emphasis is placed on student learning through research and practical application as students prepare for the Uniform Certified Public Accountant Examination and careers in public accounting, government, and private industries. All candidates completing this program are eligible to sit for the Uniformed Certified Public Accountant Examination. Student professional growth is encouraged and enhanced through participation in the Student Accounting Society and the internship program in the School of Business.

In the classroom, accounting students are introduced to a variety of software programs used by accounting professionals that provide realistic application of accounting practices and procedures. This state-of-the-art learning center engages students in the learning process as they master accounting concepts, principles, and related procedures in an environment that simulates the workplace. The School of Business' accounting program is a step above the ordinary; it equips future accounting professionals with a unique set of marketable skills that sets them apart from their peers in the workplace.

## Program Learning Outcomes

- **Communication:** Students graduating with a degree in business administration will demonstrate competency in oral and written communication skills. Students will:
  - Prepare in proper format and style the following documents: business report (one to two pages), business memo, research report and presentation.
  - Deliver an effective oral presentation on a business and/or professional topic.
- **Critical Thinking and Problem Solving:** Students graduating with a degree in business administration will demonstrate effective critical thinking and problem solving skills. Students will:
  - Apply critical thinking skills to analyze and interpret financial statements to judge business performance.
  - Apply critical thinking skills using quantitative techniques for problem solving and strategic decision making.
- **Degree Program Writing Competency:** Students will create written business and professional documents in appropriate style and format.
- **Ethics:** Students graduating with a degree in business administration will have acquired the necessary skills and knowledge to meet professional competencies as business professionals and global citizens. Students will demonstrate:
  - An understanding of the history and vocabulary unique to business disciplines.
  - Knowledge of procedures, concepts, and technical business skills through practical application (forecasting, budgeting, financial statement analyses, business plans, strategic planning).
  - The ability to read and interpret financial statements in the decision-making process.
  - Effective team work and collaborative skills in a simulated business environment.
- **Information Technology:** Students will demonstrate proficiency in the use of computers and software to manage information with statistical analysis, spreadsheet, database and other appropriate applications.
- **Professional Proficiency:** Students graduating with a degree in business administration will have acquired the necessary skills and knowledge to meet professional competencies as business professionals and global citizens. Students will demonstrate:
  - An understanding of the history and vocabulary unique to accounting disciplines.
  - Knowledge of procedures, concepts, and technical accounting business skills through practical application (forecasting, budgeting, financial statement analyses, business plans, strategic planning).
  - The ability to read and interpret financial statements in the decision-making process.
  - Effective team work and collaborative skills in a simulated business environment.

## Related Links

Accounting, BSBA Program Page (<https://www.sru.edu/academics/majors-and-minors/accounting/>)

Accounting, Economics and Finance Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/accounting-economics-and-finance/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

Core GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
Rock Studies 2 Requirements		42-43
Other Basic Requirements		0-3
Computer Competency		0-3
Major Requirements		66
Electives		12

\* All undergraduate degree programs require a minimum of 120 credits.  
Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
Select one of the following:		3-4
MATH 117	Quantitative Reasoning	
MATH 123	Introduction to Applied Calculus	
MATH 225	Calculus I	
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15-16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
Required Thematic Thread Coursework:		

ECON 202	Principles of Microeconomics
FIN 303	Issues in Global Business
or MGMT 303	Issues in Global Business
or MRKT 303	Issues in Global Business
<b>Total Hours</b>	<b>42-43</b>

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.
- <sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

### Major Requirements

- 36 major credits must be taken at SRU or PASSHE
- 36 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Business Administration Core Requirements</b>		
ACCT 209	Financial Accounting <sup>1</sup>	3
ACCT 230	Accounting Information Systems <sup>1</sup>	3
ACCT 310	Cost Accounting (Accounting Majors) <sup>1</sup>	3
ACCT 340	Legal Environment of Business <sup>1</sup>	3
ECON 201	Principles of Macroeconomics <sup>1</sup>	3

ECON 219	Business Analytics I <sup>1</sup>	3
or MGMT 219	Business Analytics I	
ECON 319	Business Analytics II <sup>1</sup>	3
or MGMT 319	Business Analytics II	
FIN 320	Managerial Finance <sup>1</sup>	3
MGMT 320	Operations Management <sup>1</sup>	3
MGMT 351	Organizational Behavior <sup>1</sup>	3
MGMT 458	Business Capstone <sup>1</sup>	3
MRKT 230	Principles of Marketing	3
Subtotal		36
<b>Required Computer Science Course</b>		
CPSC 210	Productivity Software <sup>1</sup>	3
or MIS 210	Productivity Software	
Subtotal		3
<b>Required Accounting Courses</b>		
ACCT 308	Federal Individual Income Tax <sup>2</sup>	3
ACCT 313	Intermediate Accounting I <sup>2</sup>	3
ACCT 314	Intermediate Accounting II <sup>2</sup>	3
ACCT 315	Intermediate Accounting III <sup>2</sup>	3
ACCT 345	Volunteer Income Tax Assistance (VITA)	3
or ACCT 450	Internship	
ACCT 411	Auditing Theory and Practice <sup>2</sup>	3
ACCT 413	Advanced Accounting <sup>2</sup>	3
Subtotal		21
<b>Electives</b>		
Select two of the following:		6
ACCT 311	Federal Corporate and Transfer Taxes <sup>2</sup>	
ACCT 320	Forensic Accounting <sup>2</sup>	
ACCT 324	Cost Accounting II <sup>2</sup>	
ACCT 412	Accounting Seminar <sup>2</sup>	
ACCT 419	Auditing Systems <sup>2</sup>	
ACCT 423	Advanced Accounting II <sup>2</sup>	
ACCT 429	Accounting Data Analytics <sup>2</sup>	
Subtotal		6
<b>Total Hours</b>		<b>66</b>

<sup>1</sup> Course counts for 50% of Major and not for Major GPA

<sup>2</sup> Course counts for 50% of Major and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. These opportunities can deepen and enhance the learning in accounting, economics and finance. In addition, there is a strong correlation between long-term student success and engagement in these opportunities:

1. Internships
2. Participation in student organizations
3. International study programs (short-term, semester, and year-long)
4. High-Impact Practice (HIP) designated classes
5. Student-faculty research

6. Student leadership development
7. Service-learning classes
8. Career education and development

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

ACCOUNTING - BSBA (2341)

This program is effective as of Summer 2022

Revised 05.31.22

UCC 03.01.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ECON 201	Principles of Macroeconomics (Part of Thread)	3
ENGL 102	Critical Writing	3
Select one of the following:		3-4
MATH 117	Quantitative Reasoning	
MATH 123	Introduction to Applied Calculus	
MATH 225	Calculus I	
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
CPSC 210	Productivity Software	3
or MIS 210	or Productivity Software	
ESAP 101	FYRST Seminar *	1
<b>Hours</b>		<b>16-17</b>
<b>Spring</b>		
ECON 202	Principles of Microeconomics	3
ENGL 104	Critical Reading	3
ACCT 209	Financial Accounting <sup>4</sup>	3
SCI 101	Science of Life	3
or SCI 102	or Understanding the Physical World	
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
ACCT 230	Accounting Information Systems	3
ECON 219	Business Analytics I	3
or MGMT 219	or Business Analytics I	
SCI 101	Science of Life	3
or SCI 102	or Understanding the Physical World	
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	



POLS 235	Civil Discourse and Democracy	
Creative & Aesthetic Inquiry (p. 29)		3
Declare a Thematic Thread <sup>3</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ACCT 310	Cost Accounting	3
ACCT 313	Intermediate Accounting I	3
ECON 319	Business Analytics II	3
or MGMT 319	or Business Analytics II	
MGMT 320	Operations Management	3
MRKT 230	Principles of Marketing	3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
ACCT 314	Intermediate Accounting II	3
ACCT 308	Federal Individual Income Tax	3
MGMT 351	Organizational Behavior	3
Thematic Thread Requirement (p. 29)		3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ACCT 315	Intermediate Accounting III	3
FIN 320	Managerial Finance	3
Thematic Thread Requirement (p. 29)		3
FIN 303	Issues in Global Business	3
or MGMT 303	or Issues in Global Business	
Elective		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
ACCT 411	Auditing Theory and Practice	3
Accounting Elective 1		3
ACCT 340	Legal Environment of Business	3
Thematic Thread Requirement (p. 29)		3
Elective		3
MAcc Course <sup>2</sup>		0-3
<b>Hours</b>		<b>15-18</b>
<b>Spring</b>		
ACCT 413	Advanced Accounting	3
ACCT 450	Internship	1-12
or ACCT 345	or Volunteer Income Tax Assistance (VITA)	
MGMT 458	Business Capstone	3
Accounting Elective 2		3
Elective		3
MAcc Course <sup>2</sup>		0-3
<b>Hours</b>		<b>13-27</b>
<b>Total Hours**</b>		<b>119-137</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Accounting undergraduates may take up to 4 Master of Accountancy (MAcc) graduate courses as seniors.

- <sup>3</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.
- <sup>4</sup> Accounting major should register for course section designated for Accounting majors only.
- \* Students are encouraged to take ESAP 101 as a Free Elective.

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

Major Code: 2341  
Revised: 05.03.2022

## Accounting, Certificate

A Certificate in Accounting permits students interested in a career as a Certified Public Accountant who have a non-accounting bachelor's degree or are currently enrolled in a non-accounting bachelor degree program, to pursue a program of study that will prepare them for the Uniform Certified Public Accountant Examination. Students are required to have 150 hours of college credit to receive CPA certification and licensure in the state of Pennsylvania. All candidates completing this program are eligible to sit for the Uniformed Certified Public Accountant Examination.

## Program Requirement

The Certificate in Accounting will be awarded upon successful completion of approved coursework with a 2.0 GPA for all courses taken at SRU. Students must complete a minimum of 30 hours of coursework at SRU.

CPA exam candidates will design a program of study to include the following courses.

To access Certificate Requirements, please view the Curriculum Guide tab.

## Related Links

Accounting, Certificate Program Page (<https://www.sru.edu/academics/certificates/accounting-certificate/>)

Accounting, Economics and Finance Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/accounting-economics-and-finance/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Overall GPA: 2.0 or higher

This certificate permits students interested in a career as a Certified Public Accountant (CPA) who have a non-accounting bachelor's degree or are currently enrolled in a non-accounting bachelor's degree program to pursue a program of study that will prepare them for the uniform CPA exam.

## Certificate Requirements

Code	Title	Hours
<b>Required Related Business Courses</b>		
CPSC 210	Productivity Software	3
ECON 202	Principles of Microeconomics	3
ECON 219	Business Analytics I	3
FIN 320	Managerial Finance	3
MGMT 351	Organizational Behavior	3
Subtotal		15
<b>Required Accounting Courses</b>		
Select 10 Credits from the courses listed below:		30
ACCT 209	Financial Accounting	
ACCT 230	Accounting Information Systems	
ACCT 308	Federal Individual Income Tax	
ACCT 310	Cost Accounting	
ACCT 313	Intermediate Accounting I	
ACCT 314	Intermediate Accounting II	
ACCT 322	Business Analysis and Decision Making	
ACCT 411	Auditing Theory and Practice	
ACCT 413	Advanced Accounting	
ACCT 340	Legal Environment of Business	
Select 3 credits from the following:		3
300 level ACCT elective		
400 level ACCT elective		
300 level FIN elective		
400 level FIN elective		
Subtotal		33
<b>Total Hours</b>		<b>48</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Additional Certificate Requirement

Students must complete at least 12 credit hours from SRU

## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

Certificate in Accounting (234C)

Effective Spring 2009

Revised 10.28.2021

UCC 3.26.2019

## Accounting, Minor (for BSBA and HCAM students only)

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Accounting, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/accounting/>)

Accounting, Economics and Finance Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/accounting-economics-and-finance/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Courses</b>		
ACCT 310	Cost Accounting	3
ACCT 313	Intermediate Accounting I	3
ACCT 314	Intermediate Accounting II	3
FIN 320	Managerial Finance	3
MGMT 320	Operations Management	3
MGMT 351	Organizational Behavior	3
	or HCAM 360 Healthcare Organizational Dynamics	
MRKT 230	Principles of Marketing	3
Select one of the following:		3
ACCT 230	Accounting Information Systems	
ACCT 308	Federal Individual Income Tax	
ACCT 411	Auditing Theory and Practice	
<b>Total Hours</b>		<b>24</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

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on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN ACCOUNTING for SBUS Program Students - (10C)

This program is effective as of Fall 2019.

Revised 07.26.2021

UCC 10.29.19

## Business Analytics, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

### RELATED LINKS

Business Analytics, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/accounting/>)

Accounting, Economics and Finance Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/accounting-economics-and-finance/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

### CURRICULUM GUIDE

#### GPA REQUIREMENT

Major GPA: 2.0 or higher

#### MINOR REQUIREMENTS

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Courses</b>		
ACCT 209	Financial Accounting	3
ACCT 429	Accounting Data Analytics	3
ECON 219	Business Analytics I	3
or MGMT 219	Business Analytics I	
or STAT 152	Elementary Statistics I	
ECON 319	Business Analytics II	3
or MGMT 319	Business Analytics II	
MIS 210	Productivity Software	3
Select 6 credits of Electives		
CPSC 130	Introduction to Computing and Programming	3
or CPSC 146	Programming Principles	
CPSC 406	Data Visualization	3
ECON 318	Introduction to Econometrics	3
FIN 320	Managerial Finance	3
MGMT 415	Supply Chain Analytics	3
MIS 310	Business Data Analysis and Visualization	3
STAT 252	Introduction to Statistical Modeling	3

or STAT 256	Statistical Computing
<b>Total Hours</b>	<b>36</b>

- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN BUSINESS ANALYTICS- (10D)

This program is effective as of Summer 2022

Revised 07.08.2022

UCC 03.01.2022

## Economics, Bachelor of Science in Business Administration (BSBA)

A student pursuing a bachelor of science in business administration degree can choose to major in economics. Economics studies how markets allocate resources to promote our personal and collective well-being. It helps students develop a framework for understanding how events affect different markets for goods and services and how the aggregate functioning of the markets determine output, employment and prices. Students are also able to evaluate government policies designed to stabilize the economy, redistribute income, regulate industries and foster international trade.

Economics majors are encouraged to join both Omicron Delta Epsilon, an international honor society in economics, and the Economics, Finance and International Business Club. Both sponsor a variety of professional and social activities which allow students to enhance their out-of-classroom experience, develop a sense of professional common bond and group support among themselves and create a network with off-campus professionals.

All majors are encouraged to do an internship in the summer semester between their junior and senior year. Students may seek placements in their individual area of interest. Internships are available in the areas of banking, insurance, financial advising, financial services, and manufacturing and government. In today's market, employers often offer internships to attract qualified students to their firms.

Economics offers a broader view of the economy than other business related majors. The emphasis is on developing critical thinking and problem solving skills. Graduates are well prepared for careers in the public and private sector and receive an excellent background for furthering their education at graduate or professional schools.

## Program Learning Outcomes

- **Communication:** Students graduating with a degree in business administration will demonstrate competency in oral and written communication skills. Students will:
  - Prepare in proper format and style the following documents: business report (one to two pages), business memo, research report and presentation.
  - Deliver an effective oral presentation on a business and/or professional topic.
- **Critical Thinking and Problem Solving:** Students graduating with a degree in business administration will demonstrate effective critical thinking and problem solving skills. Students will:
  - Apply critical thinking skills to analyze and interpret financial statements to judge business performance.
  - Apply critical thinking skills using quantitative techniques for problem solving and strategic decision making.
- **Degree Program Writing Competency:** Students will create written business and professional documents in appropriate style and format.
- **Ethics:** Students graduating with a degree in business administration will have acquired the necessary skills and knowledge to meet professional competencies as business professionals and global citizens. Students will demonstrate:
  - An understanding of the history and vocabulary unique to business disciplines.
  - Knowledge of procedures, concepts, and technical business skills through practical application (forecasting, budgeting, financial statement analyses, business plans, strategic planning).
  - The ability to read and interpret financial statements in the decision-making process.
  - Effective team work and collaborative skills in a simulated business environment.
- **Information Technology:** Students will demonstrate proficiency in the use of computers and software to manage information with statistical analysis, spreadsheet, database and other appropriate applications.
- **Professional Proficiency:** Students graduating with a degree in business administration will have acquired the necessary skills and knowledge to meet professional competencies as business professionals and global citizens. Students will demonstrate:
  - An understanding of the history and vocabulary unique to business disciplines.
  - Knowledge of procedures, concepts, and technical business skills through practical application (forecasting, budgeting, financial statement analyses, business plans, strategic planning).
  - The ability to read and interpret financial statements in the decision-making process.
  - Effective team work and collaborative skills in a simulated business environment.

## Related Links

Economics, BSBA Program Page (<https://www.sru.edu/academics/majors-and-minors/economics/>)

Accounting, Economics and Finance Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/accounting-economics-and-finance/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

Curriculum Guide

## GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

Core GPA: 2.0 or higher

## Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42-43
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	63
	Electives	15

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
Select one of the following:		3-4
MATH 117	Quantitative Reasoning	
MATH 123	Introduction to Applied Calculus	
MATH 225	Calculus I	
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15-16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
Required Thematic Thread Coursework:		
FIN 303	Issues in Global Business	
or MGMT 303	Issues in Global Business	

or MRKT 303	Issues in Global Business	
<b>Total Hours</b>		<b>42-43</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Business Administration Core Requirements</b>		
ACCT 209	Financial Accounting <sup>1</sup>	3
ACCT 322	Business Analysis and Decision Making <sup>1</sup>	3
ACCT 340	Legal Environment of Business <sup>1</sup>	3
ECON 201	Principles of Macroeconomics <sup>1</sup>	3
ECON 202	Principles of Microeconomics <sup>1</sup>	3
ECON 219	Business Analytics I <sup>1</sup>	3
or MGMT 219	Business Analytics I	
ECON 319	Business Analytics II <sup>1</sup>	3

or MGMT 319	Business Analytics II	
FIN 320	Managerial Finance <sup>1</sup>	3
MGMT 320	Operations Management <sup>1</sup>	3
MGMT 351	Organizational Behavior <sup>1</sup>	3
MGMT 458	Business Capstone <sup>1</sup>	3
MIS 265	Management Information Systems <sup>1</sup>	3
MRKT 230	Principles of Marketing <sup>1</sup>	3
Subtotal		39

### Required Computer Science Course

CPSC 210	Productivity Software <sup>1</sup>	3
or MIS 210	Productivity Software	
Subtotal		3

### Required Economic Courses

ECON 301	Macroeconomic Analysis <sup>2</sup>	3
ECON 302	Microeconomic Analysis <sup>2</sup>	3
ECON 318	Introduction to Econometrics <sup>2</sup>	3
Select one of the following:		3
ECON 304	Money and Banking <sup>2</sup>	
or FIN 304	Money and Banking	
FIN 323	Financial Markets and Institutions <sup>2</sup>	
Subtotal		12

### Required Electives

Select any two 300-400 level Economic Course (Excluding Internship): <sup>2</sup>		6
ECON 304	Money and Banking	
or FIN 304	Money and Banking	
ECON 312	Critical Choices in Health Care Policy	
ECON 315	Economics of Sustainable Development	
ECON 324	Game Theory, Behavioral and Experimental Economics	
ECON 360	Labor Economics	
ECON 390	Experimental	
ECON 490	Independent Study	
Subtotal		6
<b>Total Hours</b>		<b>60</b>

<sup>1</sup> Course counts for 50% of Major and not for Major GPA

<sup>2</sup> Course counts for 50% of Major and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. These opportunities can deepen and enhance the learning in accounting, economics and finance. In addition, there is a strong correlation between long-term student success and engagement in these opportunities:

1. Internships
2. Participation in student organizations
3. International study programs (short-term, semester, and year-long)
4. High-Impact Practice (HIP) designated classes
5. student-faculty research



6. Student leadership development
7. Service-learning classes
8. Career education and development

## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

ECONOMICS - BSBA (2316) This program is effective as of Summer 2022 Revised 07.06.2022 UCC 03.22.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ECON 201	Principles of Macroeconomics	3
ENGL 102	Critical Writing	3
CPSC 210 or MIS 210	Productivity Software or Productivity Software	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Select one of the following:		3
MATH 117	Quantitative Reasoning	
MATH 123	Introduction to Applied Calculus	
MATH 225	Calculus I	
ESAP 101	FIRST Seminar *	1
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ECON 202	Principles of Microeconomics	3
ENGL 104	Critical Reading	3
Creative & Aesthetic Inquiry (p. 29)		3
SCI 101 or SCI 102	Science of Life or Understanding the Physical World	3
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
ECON 219 or MGMT 219	Business Analytics I or Business Analytics I	3
ACCT 209	Financial Accounting	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	

SCI 101 or SCI 102	Science of Life or Understanding the Physical World	3
MIS 265	Management Information Systems	3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ECON 301	Macroeconomic Analysis	3
ECON 319 or MGMT 319	Business Analytics II or Business Analytics II	3
FIN 303 or MRKT 303	Issues in Global Business or Issues in Global Business	3
MRKT 230	Principles of Marketing	3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
ECON 302	Microeconomic Analysis	3
ECON 304 or FIN 304	Money and Banking or Money and Banking	3
FIN 320	Managerial Finance	3
MGMT 351	Organizational Behavior	3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ECON elective		3
ECON 318	Introduction to Econometrics	3
ACCT 322	Business Analysis and Decision Making	3
MGMT 320	Operations Management	3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
ECON elective		3
ACCT 340	Legal Environment of Business	3
ECON elective (Suggest FIN 326)		3
FIN 326	Intermediate Corporate Finance (suggested free elective)	3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
MGMT 458	Business Capstone	3
FIN 321	Investments (suggested free elective)	3
FIN 427	International Financial Management (suggested free elective)	3
Free elective		3
Free elective		3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

- <sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.
- \* Students are encouraged to take ESAP 101 as a Free Elective.

**Note:** By choosing the suggested options, students can finish with BSBA double majors in Economics and Finance, or a major in Economics with a minor in Finance.

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

Major Code: 2316  
Revised: 05.13.2022

## Economics, Minor (BSBA Majors Only)

To access Minor Requirements, please view the Curriculum Guide tab.

### Related Links

Economics, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/economics/>)

Accounting, Economics and Finance Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/accounting-economics-and-finance/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

### Curriculum Guide

#### GPA Requirement

Minor GPA: 2.0 or higher

#### Minor Requirements

- Students pursuing a minor in economics must maintain a minimum GPA of 2.000 in all business courses taken at Slippery Rock University.
- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Economics Courses</b>		
ECON 301	Macroeconomic Analysis (Required)	3
ECON 302	Microeconomic Analysis (Required)	3
ECON 300/400 level		3
ECON 300/400 level		3
<b>Required Business Courses</b>		
FIN 320	Managerial Finance	3
MGMT 320	Operations Management	3
MGMT 351	Organizational Behavior	3

MRKT 230	Principles of Marketing	3
<b>Total Hours</b>		<b>24</b>

- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN ECONOMICS (16D)

This program is effective as of Summer 2017.

Revised 07.26.2021

## Economics, Minor (Non BSBA Majors)

To access Minor Requirements, please view the Curriculum Guide tab.

A minor in economics offers students outside of the business program to gain a certification for proficiency in economics. Economics as a major has become more popular in the last decade and statistics report that majors enjoy earnings advantages over many other disciplines. Adding a minor will enable our students to participate in the robust market for economics. In addition, students interested in public policy, policy evaluation and the growing non-profit sector will benefit from more formal instruction in economics. The minor in economics develops analytical skills and could be very useful to those who want to pursue a graduate and/or professional degree.

### Related Links

Economics, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/economics/>)

Accounting, Economics and Finance Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/accounting-economics-and-finance/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

### Curriculum Guide

#### GPA Requirement

Minor GPA: 2.0 or higher

#### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Economics Minor Core</b>		
ECON 201	Principles of Macroeconomics (Required)	3
ECON 202	Principles of Microeconomics (Required)	3
ECON 301 or ECON 302	Macroeconomic Analysis Microeconomic Analysis	3
<b>Required Economics Courses</b>		<b>9</b>
ECON 300-level or higher Economics course		
POLS 255	Introduction to Public Policy	
POLS 359	Policy Analysis and Evaluation	
HIST 336	American Economic History	
<b>Total Hours</b>		<b>18</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN ECONOMICS (16A)

This program is effective as of Summer 2017.

Revised 2.4.2022

UCC 3.21.2017

## Finance, Bachelor of Science in Business Administration (BSBA)

A student pursuing a bachelor of science in business administration degree can choose to major in finance. Finance teaches students about the financial operations and financial management of firms. Students learn about the financial records of firms, the character and appraisal of corporate securities, and financial techniques used in all phases of the discipline. In addition, students may choose elective subjects which permit them to aim at a particular segment of finance, such as corporate finance, commercial and investment banking, and financial planning. Certain courses are offered each semester; others are cycled every other semester or every other year to provide the greatest diversification possible.

Finance majors are encouraged to join the Economics, Finance, and International Business Club. This organizations sponsor a variety of professional and social activities for students such as informal gatherings among students, invited speakers, tours and travel.

All majors are encouraged to do an internship in the summer semester between their junior and senior year. Students may seek placements in their individual area of interest. Internships are available in the areas of banking, insurance, financial advising, financial services, manufacturing

and government. In today's market, employers often offer internships to attract qualified students to their firms.

Finance majors are particularly well suited for positions in the private or public sector that require knowledge of financial institutions and financial operations such as banks, insurance companies and real estate firms. Students are also well prepared for graduate and professional schools.

## Program Learning Outcomes

- **Communication:** Students graduating with a degree in business administration will demonstrate competency in oral and written communication skills. Students will:
  - Prepare in proper format and style the following documents: business report (one to two pages), business memo, research report and presentation.
  - Deliver an effective oral presentation on a business and/or professional topic.
- **Critical Thinking and Problem Solving:** Students graduating with a degree in business administration will demonstrate effective critical thinking and problem solving skills. Students will:
  - Apply critical thinking skills to analyze and interpret financial statements to judge business performance.
  - Apply critical thinking skills using quantitative techniques for problem solving and strategic decision making.
- **Degree Program Writing Competency:** Students will create written business and professional documents in appropriate style and format.
- **Ethics:** Students graduating with a degree in business administration will have acquired the necessary skills and knowledge to meet professional competencies as business professionals and global citizens. Students will demonstrate:
  - An understanding of the history and vocabulary unique to business disciplines.
  - Knowledge of procedures, concepts, and technical business skills through practical application (forecasting, budgeting, financial statement analyses, business plans, strategic planning).
  - The ability to read and interpret financial statements in the decision-making process.
  - Effective team work and collaborative skills in a simulated business environment.
- **Information Technology:** Students will demonstrate proficiency in the use of computers and software to manage information with statistical analysis, spreadsheet, database and other appropriate applications.
- **Professional Proficiency:** Students graduating with a degree in business administration will have acquired the necessary skills and knowledge to meet professional competencies as business professionals and global citizens. Students will demonstrate:
  - An understanding of the history and vocabulary unique to finance disciplines.
  - Knowledge of procedures, concepts, and technical finance skills through practical application (forecasting, budgeting, financial statement analyses, business plans, strategic planning).
  - The ability to read and interpret financial statements in the decision-making process.
  - Effective team work and collaborative skills in a simulated business environment.

## Related Links

Finance, BSBA Program Page (<https://www.sru.edu/academics/majors-and-minors/finance/>)

Accounting, Economics and Finance Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/accounting-economics-and-finance/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

Core GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42-43
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	60
	Electives	15

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
Select one of the following:		3-4
MATH 117	Quantitative Reasoning	
MATH 123	Introduction to Applied Calculus	
MATH 225	Calculus I	
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15-16

#### Integrated Inquiry

*Creative and Aesthetic Inquiry*

Select 3 Credits (p. 29) 3

*Humanities Inquiry*

Select 3 Credits (p. 29) 3

*Social Science Inquiry*

Select 3 Credits (p. 29) 3

*Natural Sciences Inquiry*

SCI 101 Science of Life 3

*Physical Sciences Inquiry*

SCI 102 Understanding the Physical World 3

Subtotal 15

#### Thematic Thread

Select 12 Credits (p. 29) <sup>2</sup> 12

#### Required Thematic Thread Coursework:

ECON 202 Principles of Microeconomics

**Total Hours 42-43**

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	

**Total Hours 0-3**

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	

**Total Hours 0-3**

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

### Major Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Business Administration Core Requirements</b>		
ECON 201	Principles of Macroeconomics <sup>1</sup>	3
ACCT 209	Financial Accounting <sup>1</sup>	3
ECON 219	Business Analytics I <sup>1</sup>	3
or MGMT 219	Business Analytics I	

ECON 319	Business Analytics II <sup>1</sup>	3
or MGMT 319	Business Analytics II	
ACCT 322	Business Analysis and Decision Making <sup>1</sup>	3
MGMT 320	Operations Management <sup>1</sup>	3
MRKT 230	Principles of Marketing <sup>1</sup>	3
MGMT 351	Organizational Behavior <sup>1</sup>	3
FIN 303	Issues in Global Business <sup>1</sup>	3
or MGMT 303	Issues in Global Business	
or MRKT 303	Issues in Global Business	
FIN 320	Managerial Finance	3
ACCT 340	Legal Environment of Business	3
MGMT 458	Business Capstone <sup>1</sup>	3
MIS 265	Management Information Systems <sup>1</sup>	3
Subtotal		39
<b>Required Computer Science Course</b>		
CPSC 210	Productivity Software <sup>1</sup>	3
or MIS 210	Productivity Software	
Subtotal		3
<b>Required Finance Courses</b>		
FIN 321	Investments <sup>2</sup>	3
FIN 323	Financial Markets and Institutions <sup>2</sup>	3
FIN 326	Intermediate Corporate Finance <sup>2</sup>	3
FIN 427	International Financial Management <sup>2</sup>	3
Subtotal		12
<b>Required Electives</b>		
Select one of the following options:		6
FIN 3XX/4XX	Finance 300/400-Level Electives	
OR		
FIN 3XX/4XX	Finance 300/400-Level Electives PLUS one of the following:	
ECON 301	Macroeconomic Analysis	
ECON 302	Microeconomic Analysis	
ECON 304	Money and Banking	
ECON 318	Introduction to Econometrics	
Subtotal		6
<b>Total Hours</b>		<b>60</b>

<sup>1</sup> Course counts for 50% of Major and not for Major GPA

<sup>2</sup> Course counts for 50% of Major and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. These opportunities can deepen and enhance the learning in accounting, economics and finance. In addition, there is a strong correlation between long-term student success and engagement in these opportunities:

1. Internships
2. Participation in student organizations
3. International study programs (short-term, semester, and year-long)
4. High-Impact Practice (HIP) designated classes

5. Student-faculty research
6. Student leadership development
7. Service-learning classes
8. Career education and development

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

FINANCE - BSBA (2342)

This program is effective as of Summer 2022

Revised 07.06.2022

UCC 03.22.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ECON 201	Principles of Macroeconomics	3
CPSC 210 or MIS 210	Productivity Software or Productivity Software	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
Select one of the following:		3-4
MATH 117	Quantitative Reasoning	
MATH 123	Introduction to Applied Calculus	
MATH 225	Calculus I	
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>16-17</b>
<b>Spring</b>		
ECON 202	Principles of Microeconomics	3
ENGL 104	Critical Reading	3
SCI 101 or SCI 102	Science of Life or Understanding the Physical World	3
Humanities Inquiry (p. 29)		3
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
ECON 219 or MGMT 219	Business Analytics I or Business Analytics I	3
ACCT 209	Financial Accounting	3
MIS 265	Management Information Systems	3
SCI 101 or SCI 102	Science of Life or Understanding the Physical World	3
Free Elective		3



Declare a Thematic Thread <sup>2</sup>		
Hours		15
<b>Spring</b>		
ECON 319 or MGMT 319	Business Analytics II or Business Analytics II	3
MGMT 320	Operations Management	3
MRKT 230	Principles of Marketing	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Thematic Thread Requirement (p. 29)		3
Hours		15
<b>Third Year</b>		
<b>Fall</b>		
MGMT 303 or FIN 303	Issues in Global Business or Issues in Global Business	3
FIN 320	Managerial Finance	3
MGMT 351	Organizational Behavior	3
Thematic Thread Requirement (p. 29)		3
Free Elective (suggested ECON 302)		3
Hours		15
<b>Spring</b>		
ACCT 322	Business Analysis and Decision Making	3
ACCT 340	Legal Environment of Business	3
FIN 321	Investments	3
FIN 323	Financial Markets and Institutions	3
Thematic Thread Requirement (p. 29)		3
Hours		15
<b>Fourth Year</b>		
<b>Fall</b>		
FIN 326	Intermediate Corporate Finance	3
Finance Elective		3
Thematic Thread Requirement (p. 29)		3
Free Elective (suggested ECON 326)		3
Free Elective		3
Hours		15
<b>Spring</b>		
FIN 427	International Financial Management	3
MGMT 458	Business Capstone	3
Finance Elective		3
Free Elective (suggested ECON 301)		3
Free Elective (suggested ECON elective)		3
Hours		15
<b>Total Hours**</b>		<b>121-122</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

- Note: By choosing the suggested options, students can finish with BSBA double majors in Finance and Economics, or a major in Finance with a minor in Economics.

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

Major Code: 2342

Revised: 10.05.2021

## Finance, Minor (for BSBA and HCAM students only)

To access Minor Requirements, please view the Curriculum Guide tab.

### Related Links

Finance, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/finance/>)

Accounting, Economics and Finance Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/accounting-economics-and-finance/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

### Curriculum Guide

#### GPA Requirement

Minor GPA: 2.0 or higher

#### Minor Requirements

- Students pursuing a minor in finance must maintain a minimum GPA of 2.0 in all business courses taken at Slippery Rock University.
- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Courses</b>		
FIN 320	Managerial Finance	3
FIN 321	Investments	3
FIN 323	Financial Markets and Institutions	3
FIN 326	Intermediate Corporate Finance	3
FIN 427	International Financial Management	3
MGMT 320	Operations Management	3
MGMT 351 or HCAM 360	Organizational Behavior Healthcare Organizational Dynamics	3
MRKT 230	Principles of Marketing	3
<b>Total Hours</b>		<b>24</b>

- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN FINANCE for SBUS Program Students - (16B)

This program is effective as of Fall 2019.

Revised 11.2019

UCC 07.26.2021

## Government Contracting Assistance Center (GCAC)

### Department Phone

724-738-2346

Department Web Site URL (<https://www.sru.edu/academics/colleges-and-departments/cob/outreach-centers/>)

### Contracting Specialist

Renee Decker

The Government Contracting Assistance Center (GCAC), is a unique segment of the College of Business. GCAC is an economic development outreach program promoting economic growth in our region through assisting businesses to compete for federal, state, and local government contract and subcontract awards.

The GCAC is a full service Procurement Technical Assistance Center (PTAC). Services to area businesses include assisting with federal, state, and local government registrations and certifications, identifying bid opportunities and assisting with bid preparation and submittal. GCAC also provides training through regularly scheduled procurement fairs, seminars and webinars to educate companies on government contracting procedures and eBusiness initiatives.

## Information Systems and Technology Management

Chair	Secretary	Location	Department Phone
Dr. Abdou Jallow	Teresa Aspinall	110 Eisenberg Classroom Building	724-738-4865

Department Web Site URL (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/information-systems-and-technology-management/>)

Information Systems Fact Sheet (<https://www.sru.edu/documents/programs/factsheets/undergraduate/FS-InfoSystems.pdf>)

## Faculty

### Abel Gyan

Associate Professor  
Info Systems & Technology Mgt  
D.H.Sc., Nova South Eastern University  
M.S., Northern Kentucky University  
M.B.A., University of Leicester  
B.A., University of Science and Technology

### Abdou Karim Jallow

Associate Professor  
Info Systems & Technology Mgt  
Ph.D., Loughborough University  
M.S., Cranfield University  
B.S., Cranfield University

### Stephen Larson

Associate Professor  
Info Systems & Technology Mgt  
Ph.D., Virginia Commonwealth University  
M.S., Mercer University  
M.P.A., Brigham Young University  
B.A., Brigham Young University

### Khuong Le-Nguyen

Instructor  
Info Systems & Technology Mgt

### Jennifer Nightingale

Associate Professor  
Info Systems & Technology Mgt  
Ed.D., Duquesne University  
M.S.I.S.M., Duquesne University  
M.Ed., Duquesne University  
B.A., University of Pittsburgh

### James Rodger

Professor  
Info Systems & Technology Mgt  
D.B.A., Southern Illinois University  
M.B.A., Indiana University of PA  
B.S., University of Pittsburgh

## Programs

### Majors

- Information Systems, Bachelor of Science (BS) (p. 61)

### Minors

- Information Systems, Minor (p. 65)

## Courses

### MIS 139 - Foundations of Academic Discovery

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

### MIS 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

### MIS 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

### MIS 210 - Productivity Software

An in-depth, practical study of existing productivity software packages that focuses primarily on decision-support systems for microcomputers. Projects will involve the use of intermediate and advanced features of various software packages, as well as the use of several packages in finding computer-based solutions to information storage and retrieval problems.

Credits: 3

Term(s) Typically Offered: Offered Every Term

### MIS 211 - Information Systems Application Development

The purpose of this course is to introduce the students to the fundamental concepts and models of application development so that they can understand the key processes related to building functioning applications and appreciate the complexity of application development. Students will learn the basic concepts of program design, data structures, programming, problem solving, programming logic and fundamental design techniques for event-drive programs. Program development will incorporate the program development life cycle: gathering requirements, designing a solution, implementing a solution in programming language and testing the completed application.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

### MIS 265 - Management Information Systems

Managerial and technological issues that are necessary to understand, establish, manage and use information systems in all functional areas of organizations.

Prerequisites: CPSC 210<sup>D</sup> or MIS 210<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

### MIS 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

### MIS 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

### MIS 300 - Challenges of Computer Technology

An in-depth study of the critical issues related to the computerization of society. Ethical, legal, and moral issues raised by the evolution of computer technology will be discussed.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course, United Stated in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### MIS 301 - Practical Computer Security

A practical introduction to the threats present to the online, electronic community, and how to protect yourself and your organization from them.

We will explore the connectivity structure of the Internet, along with the security and criminal threats to members of the online community. The legal, ethical and technical issues related to threats such as viruses, worms, and identity theft will be covered.

Prerequisites: CPSC 099<sup>D</sup> or CPSC 110<sup>D</sup> or CPSC 130<sup>D</sup> or CPSC 100<sup>P</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>P</sup> Requires minimum grade of P.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MIS 310 - Business Data Analysis and Visualization**

This course covers how data analysts can process data sets from a variety of sources to create information that guides leaders in crafting strategy and tactics which allow an organization to survive and thrive in a turbulent environment. Students will review how business data analysis has been successfully used in the past and learn appropriate processes and a variety of techniques to accomplish effective analyses. Emphasis is on analyzing data, visualizing and interpreting the results of those analyses and translating results into clear and simple insights to aid managerial decision making.

Prerequisites: MIS 210<sup>C</sup> or STAT 152<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

**MIS 323 - Data Base Systems**

Database Systems is a study of relational database concepts as applied to comprehensive information systems. These concepts include data design; modeling; normalization; the use of Structured Query Language (SQL) to define, manipulate and test the database; programmatic access to a database; and practical issues faced by database developers.

Prerequisites: CPSC 130<sup>D</sup> or CPSC 146<sup>D</sup> or CPSC 210<sup>D</sup> or MIS 210<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Information Systems.

**MIS 328 - Exploring Big Data for Business I**

Due to the explosion of social media and the computerization of every aspect of social and economic activity, large volumes of structured and unstructured data currently exist. They include weblogs, videos, speech recordings, photographs, health data, e-mails, Tweets and business data. Also, improvements in technology have led to the development of powerful computers that can store and process large volumes of data. This course is to introduce students to the essential information systems and technologies used in manipulating, storing, and analyzing big data. Students will be familiar with highly scalable systems that can be used to accept, store, and analyze large volumes of unstructured data in batchmode and/or real-time.

Prerequisites: MIS 210<sup>C</sup> and (ECON 219<sup>C</sup> or MGMT 219<sup>C</sup>) and (MIS 323<sup>C</sup> or CPSC 323<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

Enrollment limited to students in a Bachelor of Science degree.

Enrollment limited to students in the College of Business college.

**MIS 333 - Introduction to Computer Forensics**

This is a fundamental course which covers computer forensics. This class covers methods and tools for gaining forensic information from computer systems and networks. It includes case studies of cyber crimes as well as the application and management of cyber forensics. The course introduces students to forensics tools using hands-on experience and the Internet.

Prerequisites: CPSC 099<sup>P</sup> or CPSC 100<sup>P</sup> or CPSC 110<sup>D</sup> or CPSC 130<sup>D</sup> or CPSC 210<sup>D</sup> or MIS 210<sup>D</sup> or PE 202<sup>D</sup>

<sup>P</sup> Requires minimum grade of P.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MIS 353 - Business Data Communications and Technologies**

This course provides an introduction and overview of computer networks and data communications. provides an understanding of the underlying concepts of computer networking, email, instant messaging (e.g. texting, multimedia messaging). Introduces several software packages used in business data communications. Emphasis is placed on terminology, techniques and issues in business data communications.

Prerequisites: CPSC 210<sup>D</sup> or MIS 210<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MIS 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1, Freshman 2 or Sophomore 1.

**MIS 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MIS 401 - Information Systems Security**

This course covers key bodies of knowledge and specializations in security and privacy associated with information systems. The course explores the management of various technologies in emerging areas of information assurance including computer and network security, digital forensics, cryptography and biometrics. course concepts include information Assurance, Information Security Governance and Risk Management, Operations Security, Cryptography, Access Control, Physical Security, Telecommunications Security, Business Continuity and Disaster Recovery Planning, Legal and Ethical Issues.

Prerequisites: CPSC 301<sup>D</sup> or MIS 301<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MIS 403 - Introduction to Healthcare Information Systems**

This course will give an introduction to computer-based information systems as they are applied to the health care industry. Topics will include characteristics of health care data, design and life cycle of HCIS, the information technology supporting HCIS and management issues.

Prerequisites: CPSC 210<sup>D</sup> or MIS 210<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MIS 413 - Systems Analysis**

A course in computer-based information systems. Course content includes: foundations of information science, techniques for system development, information architectures, and resource allocations. Case studies are discussed and utilized as class projects.

Prerequisites: CPSC 323<sup>D</sup> or MIS 323<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MIS 423 - Advanced Business Database Systems**

This course will provide students with advanced skills in database implementation and management with a focus on business systems. It will provide students with a hands-on experience of client-server databases, and the skills to develop one using reputable enterprise relational database management system. They will develop knowledge of creating, querying and maintaining relational database. Students will also learn to use advanced Structured Query Language (SQL) extensively to create integrated business systems to access, retrieve and manipulate business data. Students taking this course are expected to have a basic understanding of relational database concepts, and knowledge of a programming language.

Prerequisite: MIS 323<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

Enrollment limited to students in a Bachelor of Science degree.

Enrollment limited to students with the QUIE attribute.

Enrollment limited to students in the College of Business college.

Enrollment limited to students with department of Info Systems & Technology Mgt.

**MIS 428 - Exploring Big Data for Business II**

This course focuses on Big Data tools and technologies. It is for students who want to become conversant with the terminology and the core concepts behind big data problems, applications, and systems. It is for those who want to start thinking about how utilizing big data might be useful in their business or career. Students will gain skills to implement data-driven approach to decision-making, develop big data solutions to create business intelligence and competitive advantage through the use of analytical techniques and Big Data.

Prerequisites: MIS 210<sup>D</sup> and (ECON 219<sup>D</sup> or MGMT 219<sup>D</sup>) and (MIS 323<sup>D</sup> or CPSC 323<sup>D</sup>) and MIS 328<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

Enrollment limited to students in a Bachelor of Science degree.

Enrollment limited to students with the QUIE attribute.

Enrollment limited to students in the College of Business college.

Enrollment limited to students with department of Info Systems & Technology Mgt.

**MIS 443 - Project Management**

An introduction to project management in the information systems, or IT development, area. Provides an understanding of the purpose, methods and benefits of process management by exposing the student to the concepts, practices, processes, tools and techniques used in process management for software development.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**MIS 450 - Internship**

Professional work experience performed as an intern at selected agencies supervised both by the agency and by the Computer Science Department.

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MIS 453 - Fundamentals of Enterprise Architecture**

This course explores the design, selection, implementation and management of enterprise IT solutions. The focus is on applications and their fit with the hosting organization.

Prerequisites: MIS 323<sup>D</sup> and MIS 413<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MIS 490 - Independent Study**

Supervised study in a special interest area. Prerequisites: Two computer science courses selected from 370 or above, permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MIS 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Information Systems, Bachelor of Science (BS)

### Program Learning Outcomes

- **Communication and Interpersonal Skills:** Use written, oral and electronic methods for effective communication. The student will be able to:
  - Participate effectively on teams to accomplish a common goal.
  - Communicate effectively with a range of audiences using various mechanisms, formally or informally with excellent oral, written, and listening skills.
  - Analyze, and incorporate diverse ideas and broader perspectives represented in the diversity of people.

- Demonstrate persistence, flexibility, curiosity, creativity, risk taking, and a tolerance of these abilities in others.
- Devise effective user interfaces for information systems.
- **Ethical and Professional Responsibilities:** Discern and articulate the impact of technologies on society. The student will be able to:
  - Understand professional responsibilities in terms of the ethical, legal, security and social aspects of any given problem and its solution.
  - Demonstrate an understanding of the cognitive, social, legal, ethical, diversity, and security perspectives surrounding a given problem.
  - Assess the impact of information systems and associated technologies on individuals, groups, organizations, society, and the world for the purpose of making informed decisions from a sociological, governmental, legal, and/or security perspective.
  - Critically evaluate and possibly act on current ethical issues in the IS field.
  - Apply IS professional codes of conduct.
- **Information Technology:** Have proficient use of computers and software to manage information statistical analysis, spreadsheet, database and other appropriate applications.
  - Understand, apply and adapt various problem-solving strategies, using appropriate technology and methods.
  - Identify information systems problems and/or opportunities in terms of the human, organizational, informational and technology dimensions.
  - Analyze issues surrounding the problem and/or opportunity in terms of the human, organizational, informational, and technology dimensions; and determine the requirements appropriate to understanding the situation.
  - Design systems, architectures, processes, components, or programs to meet desired needs of the human context at varying levels of analysis (e.g., individual, group, organization, society, and/or world).
  - Evaluate the success of systems, architecture, processes, components, or programs intended to meet desired needs of the human context at varying levels of analysis (e.g., individual, group, organization, society, and/or world).
- **Professional Proficiency:** Evaluate the necessary skills and knowledge to meet professional competencies as information systems professionals and global citizens. The student will be able to:
  - Define the history and vocabulary unique to information systems professionals.
  - Understand and apply the interdisciplinary, theoretical knowledge of information systems.
  - Define and explain the core concepts, principles, processes, and theories within the academic major of IS.
  - Apply the core concepts of the academic majors of IS to real-world problems.
  - Collaborate with other professionals as well as perform successfully at the individual level.

### Related Links

Information Systems, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/information-systems/>)

Information S (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/healthcare-administration-and->

information-systems/)systems and Technology Management Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/information-systems-and-technology-management/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Overall GPA: 2.0 or higher

Core GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
Rock Studies 2 Requirements		42-43
Other Basic Requirements		0-3
Computer Competency		0-3
Major Requirements		54-55
Electives		24

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
Select one of the following:		3-4
MATH 117	Quantitative Reasoning	
MATH 123	Introduction to Applied Calculus	
MATH 225	Calculus I	
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15-16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
Required Thematic Thread Coursework:		

ECON 202	Principles of Microeconomics
<b>Total Hours</b>	<b>42-43</b>

- Course offered in multiple subjects; cannot take course in first major subject.
- One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	

<b>Total Hours</b>	<b>0-3</b>
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### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	

<b>Total Hours</b>	<b>0-3</b>
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### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

### Major Requirements

- 27 major credits must be taken at SRU or PASSHE
- 27 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Management Information System Courses</b>		
MIS 210	Productivity Software <sup>1</sup>	3
or CPSC 210	Productivity Software	
Select one of the following:		3
MIS 211	Information Systems Application Development <sup>1</sup>	
CPSC 130	Introduction to Computing and Programming <sup>1</sup>	
CPSC 146	Programming Principles <sup>1</sup>	
MIS 300	Challenges of Computer Technology <sup>1</sup>	3

or CPSC 300	Challenges of Computer Technology	
MIS 301	Practical Computer Security <sup>1</sup>	3
MIS 323	Data Base Systems <sup>1</sup>	3
or CPSC 323	Fundamentals of Database Systems	
MIS 353	Business Data Communications and Technologies <sup>1</sup>	3
MIS 413	Systems Analysis <sup>1</sup>	3
MIS 443	Project Management <sup>1</sup>	3
MIS 453	Fundamentals of Enterprise Architecture <sup>1</sup>	3
Subtotal		27
<b>Required Math Courses</b>		
ECON 219	Business Analytics I <sup>2</sup>	3
or MGMT 219	Business Analytics I	
Subtotal		3
<b>Required Business Environment Courses</b>		
ACCT 209	Financial Accounting <sup>1</sup>	3
ECON 201	Principles of Macroeconomics <sup>1</sup>	3
or ECON 202	Principles of Microeconomics	
MGMT 320	Operations Management <sup>1</sup>	3
MGMT 351	Organizational Behavior <sup>1</sup>	3
MIS 265	Management Information Systems <sup>1</sup>	3
Subtotal		15
<b>Electives</b>		
Select one of the following seven areas below:		9-10
Business (p. 63)		
Geographic Information Systems (GIS) (p. 63)		
Health Care Administration Management (p. 63)		
Programming (p. 63)		
Safety (p. 63)		
Security (p. 64)		
Web Technology (p. )		
Digital Media (p. 64)		
Big Data (p. 64)		
Subtotal		9-10
<b>Total Hours</b>		<b>54-55</b>

<sup>1</sup> Course counts for 50% of Major and Major GPA

<sup>2</sup> Course counts for 50% of Major and not for Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Business

Code	Title	Hours
Select one of the following:		3
MRKT 338	E-Commerce <sup>1</sup>	
or MGMT 352	Supply Chain Management	
Upper division <sup>2</sup>		3
Select one of the following:		3
Upper division <sup>2</sup>		
MIS 450	Internship <sup>1</sup>	
<b>Total Hours</b>		<b>9</b>

<sup>1</sup> Course counts for 50% of Major and Major GPA

<sup>2</sup> Any upper division course from BSBA discipline.

### Geographic Information Systems (GIS)

Code	Title	Hours
GES 115	Introduction to Geospatial Technologies <sup>1</sup>	3
GES 325	Introduction to Geographic Information Science <sup>1</sup>	3
GES 315	Cartography I <sup>1</sup>	3
Select one of the following:		3
GES 410	Remote Sensing <sup>1</sup>	
GES 425	Advanced Geographic Information Systems <sup>1</sup>	
GES 450	Internship <sup>1</sup>	
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> Course counts for 50% of Major and Major GPA

### Health Care Administration Management

Code	Title	Hours
HCAM 230	US Healthcare Systems <sup>1</sup>	3
MIS 403	Introduction to Healthcare Information Systems <sup>1</sup>	3
Select one of the following:		3
HCAM 300/400 level	Any upper division HCAM course <sup>1,2</sup>	
MIS 450	Internship <sup>1</sup>	
or HCAM 450	Internship-Health Care Administration & Management	
<b>Total Hours</b>		<b>9</b>

<sup>1</sup> Course counts for 50% of Major and Major GPA

<sup>2</sup> Except HCAM 360

### Programming

Code	Title	Hours
CPSC 246	Advanced Programming Principles <sup>1</sup>	3
CPSC 374	Algorithms and Data Structures <sup>1</sup>	3
Select one of the following:		3
CPSC 300/400 level	Any upper division CPSC course not used above <sup>1</sup>	
MIS 450	Internship <sup>1</sup>	
<b>Total Hours</b>		<b>9</b>

<sup>1</sup> Course counts for 50% of Major and Major GPA

### Safety

Code	Title	Hours
SAFE 118	Introduction to Safety <sup>1</sup>	3
SAFE 418	Security in the Workplace <sup>1</sup>	3
Select one of the following:		3
MGMT 354	Human Resources Management <sup>1</sup>	
or MIS 450	Internship	
<b>Total Hours</b>		<b>9</b>

<sup>1</sup> Course counts for 50% of Major and Major GPA

**Security**

Code	Title	Hours
CSS 120	Introduction to Private Security <sup>1</sup>	3
MIS 333 or CPSC 333	Introduction to Computer Forensics <sup>1</sup> Introduction to Computer Forensics	3
MIS 401 or MIS 450	Information Systems Security <sup>1</sup> Internship	3
<b>Total Hours</b>		<b>9</b>

<sup>1</sup> Course counts for 50% of Major and Major GPA

**Web Technologies**

Code	Title	Hours
CPSC 217	Advanced Web Programming <sup>1</sup>	3
CPSC 337	Introduction to Web Graphics <sup>1</sup>	3
Select one of the following:		3
CPSC 317	Server-Side Scripting <sup>1</sup>	
MRKT 338	E-Commerce <sup>1</sup>	
MIS 450	Internship <sup>1</sup>	
<b>Total Hours</b>		<b>9</b>

<sup>1</sup> Course counts for 50% of Major and Major GPA

**Digital Media**

Code	Title	Hours
Select three of the following:		9
COMM 248	Interactive Multimedia 1	
COMM 258	Interactive Multimedia 2	
COMM 307	Social Media	
MIS 450	Internship	
<b>Total Hours</b>		<b>9</b>

**Big Data**

Code	Title	Hours
Select three of the following:		9
MIS 328	Exploring Big Data for Business I	
MIS 423	Advanced Business Database Systems	
MIS 428	Exploring Big Data for Business II	
<b>Total Hours</b>		<b>9</b>

**Co-curricular and Experiential Learning**

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership development
5. Service-learning classes
6. Career education and development
7. Internships
8. Volunteering in healthcare industry related settings
9. Job Shadowing

**Important Curriculum Guide Notes**

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

INFORMATION SYSTEMS - BS (2240)

This program is effective as of Summer 2022

Revised 07.06.2022

UCC 07.06.2022

**Recommended Four-Year Plan**

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
MIS 210	Productivity Software	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Rock Studies 2 Requirements (p. 29)		3
Rock Studies 2 Requirements (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
ECON 219	Business Analytics I	3
or MGMT 219	or Business Analytics I	
MIS 265	Management Information Systems	3
Rock Studies 2 Requirements (p. 29)		3
Rock Studies 2 Requirements (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
ACCT 209	Financial Accounting	3
Select one of the following:		3
MIS 211	Information Systems Application Development	
CPSC 130	Introduction to Computing and Programming	
CPSC 146	Programming Principles	
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Rock Studies 2 Requirements (p. 29)		3
Rock Studies 2 Requirements (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
MGMT 351	Organizational Behavior	3

MIS 353	Business Data Communications and Technologies	3
ECON 201 or ECON 202	Principles of Macroeconomics or Principles of Microeconomics	3
Rock Studies 2 Requirements (p. 29)		3
Rock Studies 2 Requirements (p. 29)		3

**Hours** **15**

### Third Year

#### Fall

MIS 300 or CPSC 300	Challenges of Computer Technology or Challenges of Computer Technology	3
ECON 319 or MGMT 319	Business Analytics II or Business Analytics II	3
MGMT 320	Operations Management	3
MIS 323 or CPSC 323	Data Base Systems (or free elective) or Fundamentals of Database Systems	3
Free Elective		3

**Hours** **15**

#### Spring

MIS 323 or CPSC 323	Data Base Systems or Fundamentals of Database Systems	3
MGMT 351	Organizational Behavior	3
Information Systems Elective		3
Free Elective		3
Free Elective		3

**Hours** **15**

### Fourth Year

#### Fall

MIS 413	Systems Analysis	3
Rock Studies 2 Requirements (p. 29)		3
Information Systems Elective		3
Free Elective		3
Free Elective		3

**Hours** **15**

#### Spring

MIS 443	Project Management	3
MIS 453	Fundamentals of Enterprise Architecture	3
Information Systems Elective		3
Free Elective		3
Free Elective		3

**Hours** **15**

**Total Hours\*\*** **121**

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 2240

Revised: 08.27.2021

## Information Systems, Minor

A minor in Information Systems is designed for students who are pursuing bachelor's degrees in fields other than information systems and who wish to continue their education in information systems. Candidates for the minor are required to complete a total of 21 credit hours.

The minor is designed to provide more than a basic knowledge of information systems. Specifically, persons completing the program are expected to achieve competency in understanding information systems terminology, concepts and principles; proper application and knowledge of current hardware and software; data communications; and planning and carrying out system development and the management of information systems. Students acquiring these skills are well-received in the business community and in governmental organizations.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Information Systems, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/information-systems/>)

Information S (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/healthcare-administration-and-information-systems/>) Systems and Technology Management Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/information-systems-and-technology-management/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.
- A student cannot major or minor in the same discipline/academic area, but may minor in a specialization offered by his/her major department.
- The Information Systems minor must submit this self-maintained progress sheet to the Computer Science Department for verification.

Code	Title	Hours
<b>Required Courses</b>		
Select one of the following:		3
CPSC 130	Introduction to Computing and Programming	
CPSC 146	Programming Principles	
MIS 211	Information Systems Application Development	
MIS 210 or CPSC 210	Productivity Software	3



MIS 323	Data Base Systems	3
or CPSC 323	Fundamentals of Database Systems	
Select one of the following:		3
MIS 300	Challenges of Computer Technology	
or CPSC 300	Challenges of Computer Technology	
MIS 333	Introduction to Computer Forensics	
COMM 480	The Communication Age	
MIS 353	Business Data Communications and Technologies	
<b>Electives</b>		
Select one of the following groups (A-E):		9
<i>Group A – Business Specialization</i>		
ACCT 230	Accounting Information Systems	
or MIS 265	Management Information Systems	
ECON 201	Principles of Macroeconomics	
ACCT 209	Financial Accounting	
<i>Group B – Health Specialization</i>		
HCAM 230	US Healthcare Systems	
MIS 265	Management Information Systems	
or MIS 403	Introduction to Healthcare Information Systems	
HCAM 300/400	Any upper division HCAM course	
<i>Group C – Safety Specialization</i>		
SAFE 118	Introduction to Safety	
SAFE 418	Security in the Workplace	
MIS 265	Management Information Systems	
or MGMT 354	Human Resources Management	
<i>Group D – Geographic Information Technology Specialization</i>		
GES 315	Cartography I	
GES 325	Introduction to Geographic Information Science	
MIS 265	Management Information Systems	
or GES 425	Advanced Geographic Information Systems	
<i>Group E – Information Security Specialization</i>		
MIS 301	Practical Computer Security	
or CPSC 301	Practical Computer Security	
MIS 333	Introduction to Computer Forensics	
MIS 401	Information Systems Security	
<i>Group F – Communication Specialization</i>		
COMM 110	Communication Concepts	
or COMM 115	Visual Literacy	
COMM 248	Interactive Multimedia 1	
or COMM 263	Mass Media and Society	
Select one of the following:		
COMM 307	Social Media	
MRKT 338	E-Commerce	
COMM 490	Independent Study	
or MIS 490	Independent Study	
<b>Total Hours</b>		<b>21</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Minor in Information Systems (14B)

This program is effective as of Fall 2018.

Revised 06-2019

## Management and Marketing

Chair	Secretary	Location	Department Phone
Dr. Roger Solano	Tammie Cramer	105 Eisenberg Classroom Building	724-738-4865

Department Web Site URL (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/management-and-marketing/>)

Management Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/FS-Management.pdf>)

Marketing Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/FS-Marketing.pdf>)

## Faculty

### Frances Amatucci

Associate Professor  
Management & Marketing  
Ph.D., University of Pittsburgh  
M.B.A., University of Pittsburgh  
B.S., University of Massachusetts

### Anindya Chatterjee

Professor  
Management & Marketing  
Ph.D., Temple University  
M.M.S., Birla Institute of Technology and Science (India)

### Rhonda Clark

Associate Professor  
Management & Marketing  
Ph.D., Capella University  
M.S., California University of Pennsylvania  
B.S., California University of Pennsylvania

### Diane Galbraith

Professor  
Management & Marketing  
Ed.D., Indiana University of Pennsylvania  
M.S., LaRoche College  
B.S., Indiana University of Pennsylvania

### Shahriar Gias

Associate Professor

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 Ph.D., University of Texas at Arlington  
 M.B.A., Delaware State University  
 M.A., University of Tasmania  
 B.B.A., North South University

#### **Baek Joo**

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 M.A., University of Minnesota  
 B.A., Sogang University

#### **Senthilkumar Muthusamy**

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 Ph.D., Oklahoma State University  
 M.B.A., Bharathidasan Institute of Management  
 B.S.E., Bharathiar University

#### **Jeananne Nicholls**

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 D.B.A., Kennesaw State University  
 M.B.A., Duquesne University  
 B.S., Carlow University

#### **Kurt Schimmel**

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 D.B.A., Cleveland State University  
 M.B.A., Duquesne University  
 B.A., Duquesne University

#### **Brion Scudder**

Associate Professor  
 Management & Marketing

#### **Roger Solano**

Professor  
 Management & Marketing  
 Ph.D., New Jersey Institute of Technology  
 M.S., New Jersey Institute of Technology  
 B.S., Universidad Del Zulia

#### **Theresa Wajda Soltis**

Professor  
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 Ph.D., University of Pittsburgh  
 M.Ed., University of Pittsburgh  
 B.A., University of Pittsburgh

#### **Liang Xu**

Associate Professor  
 Management & Marketing  
 Ph.D., University of Missouri  
 M.B.A., University of Missouri  
 E.E., Nanjing Institute of Technology

## **Programs**

### **Majors**

- Business Undeclared (p. 75)
- Management, Bachelor of Science in Business Administration (BSBA)  
 - Concentration in General Management (p. 79)
- Management, Bachelor of Science in Business Administration (BSBA)  
 - Concentration in Human Resources (p. 83)
- Management, Bachelor of Science in Business Administration (BSBA)  
 - Concentration in Supply Chain Management (p. 86)
- Management, Bachelor of Science in Business Administration (BSBA)  
 - Online Degree Completion Program (p. 89)
- Marketing, Bachelor of Science in Business Administration (BSBA)  
 (p. 91)

### **Minors**

- Business Administration, Minor (Non-BSBA Majors) (p. 74)
- Business Management Pre-MBA, Minor (Non-Business Majors Only)  
 (p. 74)
- Human Resource Management, Minor (BSBA and HCAM Majors)  
 (p. 78)
- Human Resource Management, Minor (Non-BSBA Majors) (p. 79)
- Management, Minor (BSBA majors) (p. 91)
- Marketing, Minor (p. 94)
- Sustainable Management, Minor (BSBA majors only) (p. 95)

## **Courses**

### **MGMT Courses**

#### **MGMT 130 - Dynamics of Global Commerce**

Exploration of the challenges of business operations in the global marketplace. Topics discussed include the business, economic, social, and political aspects of the global marketplace. This may include, but not be limited to, topics such as e-commerce, entrepreneurship, sustainability, and business ethics.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Thematic Thread(s): Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

#### **MGMT 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**MGMT 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MGMT 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**MGMT 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MGMT 219 - Business Analytics I**

Probability and statistics in a business environment, encompassing descriptive statistics, probability theory, hypothesis testing, linear regression and correlation. Cross-listed as ECON 219.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MGMT 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MGMT 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**MGMT 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MGMT 303 - Issues in Global Business**

This course will focus on fundamental issues in the modern globalization of business. The topics covered will include the cultural environments in which business work, politics and law in global business, economic integration, global trade and investment, global finance, global operations and managing global businesses. A special emphasis will be placed on the challenges and opportunities presented to global businesses by the social, political and economic diversity encountered in the global marketplace.

Prerequisites: ECON 201<sup>D</sup> and ECON 202<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 319 - Business Analytics II**

This course introduces various methods on how to analyze large sets of business data in order to uncover potential business opportunities. Students will learn both predictive analytics and prescriptive analytics. The predictive analytics include trend analysis, forecasting techniques, data mining, and spreadsheet modeling. Prescriptive analytics covers linear optimization and decision analysis. Business software such as productivity software, data visualization, and business intelligence software will be heavily used as a main focus of learning.

Prerequisites: (ECON 219<sup>D</sup> or MGMT 219<sup>D</sup> or STAT 152<sup>D</sup> or BUSA 219<sup>D</sup>) and (MATH 113<sup>D</sup> or MATH 115<sup>D</sup> or MATH 117<sup>D</sup> or MATH 118<sup>D</sup> or MATH 122<sup>D</sup> or MATH 123<sup>D</sup> or MATH 125<sup>D</sup> or MATH 131<sup>D</sup> or MATH 210<sup>D</sup> or MATH 225<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

**MGMT 320 - Operations Management**

Operations strategy and competition, production systems and processes, decision analysis and graphical linear programming, quality management and process control, facility location and layout, work methods and measurement, inventory management and project evaluation review technique (PERT).

Prerequisites: (MGMT 219<sup>D</sup> or BUSA 219<sup>D</sup> or ECON 219<sup>D</sup>) or (MATH 152<sup>D</sup> or STAT 152<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 341 - Organizational Leadership**

This course will include a combination of leadership theory, practice, and application to contemporary organizations. Major challenges will be discussed including the strengths and weaknesses of these firms and ways in which organizational effectiveness can be improved. We will discuss the inextricable relationship between leadership and diversity and the essential nature of a diverse workforce for maximum success through the empowerment of people. Concepts such as strategic thinking, self-leadership, change and globalization are included.

Prerequisite: MGMT 351<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Summer & Winter Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 351 - Organizational Behavior**

Study of the satisfaction, motivation, learning, problem solving and growth of persons in organizational settings. Conceptual learning is combined with self-analysis in each area.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 352 - Supply Chain Management**

Management science analysis and optimization techniques including linear programming, transportation algorithm, waiting line models, simulation processes, network models, materials requirement planning, and forecasting methods applied to a variety of business operations situations.

Prerequisite: MGMT 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall, Winter, & Summer

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 353 - Development of Management Thought**

Contemporary management as the result of an evolutionary process involving the thoughts and writings of many famous management theoreticians and practitioners.

Prerequisite: MGMT 351<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 354 - Human Resources Management**

A survey course emphasizing aspects of the basic processes of HRM including principles, policies, tools and techniques utilized in the human resource function in any organization. Managing human capital encompasses recruiting, hiring, training, development, compensation, and performance management. Managing individuals and groups that include a diversity of backgrounds throughout each function, are core human resource activities and are incorporated in this class through a variety of techniques.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 357 - International Operations Management**

Issues critical to globalization of manufacturing operations including global planning and organization, comparison of operations, international operations strategy, managerial issues in global operations.

Prerequisites: MGMT 351<sup>D</sup> and MGMT 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 360 - Total Quality Management**

Managerial and technological issues that are necessary to understand and implement quality assurance programs including human resource development, strategic planning, management information systems, cost effectiveness, implementation procedures and statistical quality control.

Prerequisites: (MGMT 219<sup>D</sup> or BUSA 219<sup>D</sup> or ECON 219<sup>D</sup> or MATH 152<sup>D</sup> or STAT 152<sup>D</sup>) and MGMT 351<sup>D</sup> and (MRKT 230<sup>D</sup> or MRKT 330<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 364 - Recruitment and Selection**

Components of an effective selection program including job analysis, employment testing, and selection interviews with emphasis on the legal issues and relevant federal regulations.

Prerequisite: MGMT 354<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 370 - Sustainable Entrepreneurship and Innovation**

This integrative course introduces students to issues related to sustainable new venture creation. It includes topics such as the importance of innovation and creativity in opportunity recognition and the design of sustainable business models, industry/market analysis, resource acquisition and disposition, assessing a venture's financial strength, and ethical legal issues. Students will learn the entrepreneurial process while acknowledging multiple stakeholders and addressing social, economic and environmental concerns.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 415 - Supply Chain Analytics**

Supply chain analytics is the process of synthesizing massive amounts of data from procurement, production, warehouse, distribution, and consumption to assess and improve supply chain performance. Types of supply chain analytics included in this course are descriptive analytics, predictive analytics, prescriptive analytics, and cognitive analytics.

Prerequisites: MGMT 320<sup>C</sup> and MGMT 352<sup>\*C</sup> (may be taken concurrently).  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1 or Senior 2.

**MGMT 449 - Sustainable Management Internship**

Supervised placement, work, and research in selected public and private organizations.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment is limited to students with a program in Sustainable Management or Sustainable Management.

**MGMT 450 - Internship**

Supervised placement, work, and research in selected public and private organizations.

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 451 - Employment Law**

This course covers the law as it applies to all aspects of the employer - employee relation, including union activity, discrimination, selection, testing and employment contracts.

Prerequisites: MGMT 351<sup>D</sup> or MGMT 250<sup>D</sup> or MGMT 251<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 452 - Management-Labor Relations**

Modern industrial relations from the perspective of both management and labor, including the historical development of large-scale business and organized labor.

Prerequisite: MGMT 351<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 453 - Collective Bargaining**

The major issues in the negotiation process: bargaining, public policy implications, impasse resolution, strikes, and legislation affecting collective bargaining.

Prerequisite: MGMT 351<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 454 - Management Seminar**

Contemporary methods and theories of management are discussed in terms of current organizational practice.

Prerequisites: MGMT 320<sup>D</sup> and MGMT 354<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**MGMT 455 - Compensation Management**

Rationale, composition and administration of employee reward systems considering both the internal organizational factors and external environmental factors. Contemporary issues such as comparable worth, CEO salaries, and the rising cost of benefits are included.

Prerequisite: MGMT 354<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 456 - Management and Society**

This course will engage students in exploring the social, ethical, environmental, economic, and political/legal restraints on organizational decision-making that managers face today. Students will develop critical thinking, communication and managerial skills necessary to be effective in a business world, where multiple stakeholder interests must be addressed.

Prerequisite: MGMT 351<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 457 - International Management**

Examination of environments, resources, strategies and models of managerial functions in international organizations.

Prerequisite: MGMT 351 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 458 - Business Capstone**

Business Capstone uses a web-based business simulation as a learning tool to enhance student understanding of the interaction and influence of an organization's competitive strategy and policy on the functional area of business. Course material includes the sources of competitive advantage, cross-functional integration and management's commitment to ethics and diversity.

Prerequisites: ACCT 209<sup>D</sup> and (ACCT 210<sup>D</sup> or ACCT 310<sup>D</sup> or ACCT 322<sup>D</sup>) and ECON 201<sup>D</sup> and ECON 202<sup>D</sup> and FIN 320<sup>D</sup> and (ECON 219<sup>D</sup> or BUSA 219<sup>D</sup>) and MGMT 320<sup>D</sup> and MGMT 351<sup>D</sup> and (MRKT 330<sup>D</sup> or MRKT 230<sup>D</sup>) and (ECON 319 (may be taken concurrently)<sup>D</sup> or MGMT 319 (may be taken concurrently)<sup>D</sup> or MATH 123 (may be taken concurrently)<sup>D</sup> or MATH 125<sup>\*D</sup> or MATH 225<sup>\*D</sup>) and (ACCT 340 (may be taken concurrently)<sup>D</sup> or BUSA 340 (may be taken concurrently)<sup>D</sup>) and (FIN 303 (may be taken concurrently)<sup>D</sup> or MRKT 303 (may be taken concurrently)<sup>D</sup> or BUSA 303 (may be taken concurrently)<sup>D</sup> or MGMT 303 (may be taken concurrently)<sup>D</sup>) and (CPSC 365 (may be taken concurrently)<sup>D</sup> or MIS 365 (may be taken concurrently)<sup>D</sup> or MIS 265<sup>\*D</sup>) (may be taken concurrently).

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

**MGMT 459 - Sustainable Business Consulting**

In this course student teams engage in field-based consulting to analyze actual problem situations involving sustainability for regional businesses.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

**MGMT 460 - Training and Development**

Training and development as a human resource management function supporting organizational strategic planning including: training needs analysis, training program objectives, training methods, management and organization development methods, program evaluation and cost-benefit analysis, and training budgeting. Current trends in training and development will be covered including computer based training, competency based training and cross cultural training.

Prerequisite: MGMT 354<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 465 - Management of Information Technology**

Management and specific technical concepts and techniques applied to the function of providing information technology services to the organization.

Prerequisite: MGMT 351<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 490 - Independent Study**

In-depth reading and/or research with the guidance of a faculty member in an area selected by the student. Prerequisites: 12 credits in major courses, application, and permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT Courses****MRKT 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**MRKT 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MRKT 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**MRKT 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MRKT 230 - Principles of Marketing**

An analytical overview of market decision-making including product, pricing, place, and promotional strategies considering the heterogeneity and diversity of customers and markets with respect to their demographic, geographic, psychographic, cultural, and behavioral characteristics.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1 may **not** enroll.

**MRKT 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MRKT 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**MRKT 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MRKT 303 - Issues in Global Business**

This course will focus on fundamental issues in the modern globalization of business. The topics covered will include the cultural environments in which business work, politics and law in global business, economic integration, global trade and investment, global finance, global operations and managing global businesses. A special emphasis will be placed on the challenges and opportunities presented to global businesses by the social, political and economic diversity encountered in the global marketplace.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 331 - Distribution Management**

Principles, methods and problems relating to wholesaling, retailing and physical distribution management.

Prerequisites: MRKT 230<sup>D</sup> or MRKT 330<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 332 - Business Marketing**

A management perspective of the internal and external environments affecting the demand for industrial goods; marketing intelligence and control; and marketing strategy for product, service, channel, price, and promotional components.

Prerequisites: MRKT 330<sup>D</sup> or MRKT 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 333 - Consumer Behavior**

The buying process with emphasis on economic, social, cultural and psychological determinants of consumer choice.

Prerequisites: MRKT 330<sup>D</sup> or MRKT 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 334 - Advertising Management**

Management of advertising, including background, roles, planning, media strategy, message, testing, research, evaluation, and administration of advertising.

Prerequisites: MRKT 330<sup>D</sup> or MRKT 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 335 - Retail Management**

Store location and layout, retail personnel management, merchandising policies and control, and marketing strategy.

Prerequisites: MRKT 330<sup>D</sup> or MRKT 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 336 - Professional Selling**

Provides foundations of sales processes and management to prepare students for careers in selling or sales management.

Prerequisites: MRKT 330<sup>D</sup> or MRKT 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 338 - E-Commerce**

The role, structure, organization, and use of the Internet as a channel of distribution to conduct electronic commerce.

Prerequisites: (MRKT 230<sup>D</sup> or MRKT 330<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 425 - Marketing Analytics**

Marketing analytics is the process of analyzing and utilizing data from the four P's of marketing promotion, placement, product, and pricing for marketing decision making and to assess and improve marketing performance. Types of marketing analytics included in this program are descriptive, predictive, prescriptive, and cognitive.

Prerequisites: MRKT 430<sup>D</sup> and ECON 319<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

**MRKT 430 - Marketing Research**

Research methodology as a managerial tool used in problem solving and decision making in marketing.

Prerequisites: (MGMT 219<sup>D</sup> or BUSA 219<sup>D</sup> or ECON 219<sup>D</sup>) and (MRKT 330<sup>D</sup> or MRKT 230<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 431 - Marketing Seminar**

Advanced topics in marketing with emphasis on the analysis and solution of marketing problems.

Prerequisites: MGMT 320<sup>D</sup> and MRKT 332<sup>D</sup> and MRKT 333<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 437 - International Marketing**

The marketing issues of firms engaged in international business with emphasis on strategies for successful foreign market penetration.

Prerequisites: MRKT 330<sup>D</sup> or MRKT 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 450 - Internship**

Supervised placement, work, and research in selected public and private organizations.

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 490 - Independent Study**

In-depth reading and/or research with the guidance of a faculty member in an area selected by the student. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Business Administration, Minor (Non-BSBA Majors)

The Business Administration minor provides excellent value for non-BSBA students. The program offers essential knowledge in business functional areas such as Economics, Accounting, Finance, Management, and Marketing. The Business Administration minor not only enhances students' career readiness but also cultivates future entrepreneurs.

To access Minor Requirements, please view the Curriculum Guide tab.

### Related Links

Business Administration, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/business-administration-minor/>)

Management and Marketing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/management-and-marketing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Courses</b>		
ECON 201 or ECON 202	Principles of Macroeconomics Principles of Microeconomics	3
ACCT 209	Financial Accounting	3
MRKT 230	Principles of Marketing	3
HCAM 360 or MGMT 351	Healthcare Organizational Dynamics Organizational Behavior	3
<b>Electives</b>		
Select 2 additional courses from the 200, 300, 400 level in any business discipline (ACCT, ECON, FIN, MGMT, MRKT)		6
Select 2 additional courses from the 300 or 400 level in any business discipline (ACCT, ECON, FIN, MGMT, MRKT)		6
<b>Total Hours</b>		<b>24</b>

- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN BUSINESS ADMINISTRATION (51A)

This program is effective as of Fall 2015.

Revised 07.26.2021

UCC 10.29.19

## Business Management Pre-MBA, Minor (Non-Business Majors Only)

The Management Pre-MBA minor is essential for students who plan to pursue a MBA degree. This minor provides fundamental knowledge in business functional areas such as Economics, Accounting, Finance, Management, Marketing, and Management Information Systems. The Management Pre-MBA minor prepares non-BSBA students for more advanced courses in the MBA program.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Management Pre-MBA, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/management-pre-mba-minor/>)

Management and Marketing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/management-and-marketing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Courses</b>		
ACCT 209	Financial Accounting	3
ACCT 340	Legal Environment of Business	3
ECON 202	Principles of Microeconomics	3
ECON 219	Business Analytics I	3
FIN 320	Managerial Finance	3
HCAM 360	Healthcare Organizational Dynamics	3
or MGMT 351	Organizational Behavior	
MIS 265	Management Information Systems	3
MRKT 230	Principles of Marketing	3
<b>Total Hours</b>		<b>24</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN BUSINESS MANAGEMENT PRE MBA (51K)

For Non BSBA students

This program is effective as of Fall 2018.

Revised 07.26.2021

UCC 10.29.19

## Business Undeclared

You will learn a strong foundation in business administration, as well as technical and practical skills in accounting, finance, economics, operations, international management, human resources management and marketing. You will improve your critical-thinking and problem-solving skills. This exploratory program allows you to learn about different business areas while you decide on your major. Students are encouraged to declare a major by their junior year.

## PROGRAM LEARNING OUTCOMES

- **Critical Thinking and Problem Solving:** Students graduating with a degree in business administration will demonstrate effective critical thinking and problem-solving skills. Students will:
  - Apply critical thinking skills to analyze and interpret financial statements to judge business performance.
  - Apply critical thinking skills using quantitative techniques for problem solving and strategic decision making
- **Communication:** Students graduating with a degree in business administration will demonstrate competency in oral and written communication skills. Students will:
  - Prepare in proper format and style the following documents: business report (one to two pages), business memo, research report and presentation.
  - Deliver an effective oral presentation on a business and/or professional topic.
- **Information Technology:** Students will demonstrate proficiency in the use of computers and software to manage information with statistical analysis, spreadsheet, database, and other appropriate applications.
- **Ethics:** Students graduating with a degree in business administration will demonstrate an understanding of the legal environment and ethical standards of business and an awareness of the implications of their behavior and actions as a business professional. Students will apply an appropriate framework for examining ethical dilemmas and be able to (1) identify ethical issues and stakeholders, (2) evaluate alternative course(s) of action, and (3) formulate an appropriate action plan.
- **Professional Proficiency:** Students graduating with a degree in business administration will have acquired the necessary skills and knowledge to meet professional competencies as business professionals and global citizens. Students will:
  - Demonstrate an understanding of the history and vocabulary unique to business disciplines.
  - Demonstrate knowledge of procedures, concepts, and technical business skills through practical application (forecasting, budgeting, financial statement analyses, business plans, strategic planning).
  - Demonstrate the ability to read and interpret financial statements in the decision-making process.
  - Demonstrate effective teamwork and collaborative skills in a simulated business environment.



Related Links

Business Undeclared Program Page (<https://www.sru.edu/academics/majors-and-minors/business-undeclared/>)

Management and Marketing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/management-and-marketing/>)

Accounting, Economics and Finance Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/accounting-economics-and-finance/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

Curriculum Guide

GPA Requirement

Overall: 2.0 or higher  
Core GPA: GPA 2.0 or higher

Summary\*

Code	Title	Hours
Rock Studies 2 Requirements		42-43
Other Basic Requirements		0-3
Computer Competency		0-3
Major Requirements		45
Electives		33

\* All undergraduate degree programs require a minimum of 120 credits.  
Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
Select one of the following:		3-4
MATH 117	Quantitative Reasoning	3
MATH 123	Introduction to Applied Calculus	
MATH 225	Calculus I	
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	3
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15-16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
ECON 202	Principles of Microeconomics	3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3

Physical Sciences Inquiry

SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42-43</b>

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.
- <sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
Total Hours		0-3

Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		
		<b>0-3</b>

DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

Major Requirements

- You are strongly encouraged to declare a major by the junior year. To assist you in keeping on-track for graduation in a timely manner, consult your My Rock Audit report and meet with your adviser.

Code	Title	Hours
<b>Business Administration Core Requirements</b>		
ECON 201	Principles of Macroeconomics	3
ECON 202	Principles of Microeconomics	3
ECON 219	Business Analytics I <sup>1</sup>	3
or MGMT 219	Business Analytics I	

ECON 319	Business Analytics II <sup>1</sup>	3
or MGMT 319	Business Analytics II	
ACCT 209	Financial Accounting	3
ACCT 322	Business Analysis and Decision Making	3
MGMT 320	Operations Management	3
MRKT 230	Principles of Marketing	3
MGMT 351	Organizational Behavior	3
MGMT 303	Issues in Global Business	3
or FIN 303	Issues in Global Business	
FIN 320	Managerial Finance	3
ACCT 340	Legal Environment of Business	3
MGMT 458	Business Capstone <sup>1</sup>	3
MIS 265	Management Information Systems <sup>1</sup>	3
Subtotal		42
<b>Required Computer Science Course</b>		
CPSC 210	Productivity Software <sup>1</sup>	3
or MIS 210	Productivity Software	
<b>Total Hours</b>		<b>45</b>

<sup>1</sup> Course counts for 50% of Major and Major GPA

<sup>2</sup> A grade of 'C' or higher must be earned in these courses

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-Curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership development
5. Service-learning classes
6. Career education and development
7. Internships
8. Volunteering in healthcare industry related settings
9. Job Shadowing

BUSINESS UNDECLARED - BSBA (2398)

This program is effective as of Fall 2019.

Revised 10.2019

UCC 4.9.2019

## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

## RECOMMENDED FOUR-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
MATH 117	Quantitative Reasoning	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>2</sup>	3
ECON 201	Principles of Macroeconomics	3
MIS 210	Productivity Software <sup>2</sup>	3
<b>Optional</b>		
ESAP 110	Beginning Algebra	
CPSC 100	Introduction to Computing for Liberal Arts (or Computer Competency Exam)	
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
SCI 101	Science of Life	3
Humanities Inquiry (p. 29)		3
Creative & Aesthetic Inquiry (p. 29)		3
ECON 202	Principles of Microeconomics	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
SCI 102	Understanding the Physical World	3
ECON 219	Business Analytics I <sup>2</sup>	3
or MGMT 219	or Business Analytics I	
MIS 265	Management Information Systems	3
MRKT 230	Principles of Marketing	3
Declare a Thematic Thread <sup>3</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Thematic Thread Requirement (p. 29)		3
ACCT 209	Financial Accounting	3
MGMT 320	Operations Management	3
MGMT 351	Organizational Behavior	3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
Thematic Thread Requirement (p. 29)		3
ECON 319	Business Analytics II <sup>2</sup>	3
or MGMT 319	or Business Analytics II	
FIN 303	Issues in Global Business <sup>2</sup>	3
or MRKT 303	or Issues in Global Business	
Elective		3

Declare Major: Major Course	3
<b>Hours</b>	<b>15</b>
<b>Spring</b>	
Thematic Thread Requirement (p. 29)	3
ACCT 322 Business Analysis and Decision Making	3
FIN 320 Managerial Finance	3
Elective	3
Declare Major: Major Course	3
<b>Hours</b>	<b>15</b>
<b>Fourth Year</b>	
<b>Fall</b>	
Thematic Thread Requirement (p. 29)	3
ACCT 340 Legal Environment of Business	3
Declare Major: Major Course	3
Declare Major: Major Course	3
Declare Major: Major Course	3
Optional	
MBA Course <sup>2</sup>	
MBA Course <sup>2</sup>	
<b>Hours</b>	<b>15</b>
<b>Spring</b>	
MGMT 458 Business Capstone <sup>2</sup>	3
Declare Major: Major Course	3
Declare Major: Major Course	3
Declare Major: Major Course	3
Elective	3
Optional	
MBA Course <sup>2</sup>	
MBA Course <sup>2</sup>	
<b>Hours</b>	<b>15</b>
<b>Total Hours**</b>	<b>121</b>

<sup>1</sup> Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

<sup>2</sup> Course counts for 50% of Major and Major GPA.

<sup>3</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 2398  
Revised: 06.09.2022

## Human Resource Management, Minor (BSBA and HCAM Majors)

The Human Resource Management minor provides excellent value for BSBA and HCAM students. The program offers essential knowledge

in a solid introduction to HR systems and practices that offer the ability to become an HR manager. The HRM minor will broaden the learning experiences and professional opportunities of Business majors by creating a second focus in HR management. You will be prepared to work in the field of HRM in small, medium, and large organizations in either the public or private sector.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Management: Human Resources Program Page (<https://www.sru.edu/academics/majors-and-minors/management-human-resources/>)

Management and Marketing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/management-and-marketing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

GPA: 2.0 or higher

### Minor Requirements

Code	Title	Hours
<b>Required Courses</b>		
MGMT 354	Human Resources Management	3
<b>HRM Minor (Core)</b>		
MGMT 364	Recruitment and Selection	3
MGMT 452	Management-Labor Relations	3
MGMT 455	Compensation Management	3
MGMT 460	Training and Development	3
<b>Additional Courses</b>		
Select one of the following:		3
MGMT 451 or ACCT 451	Employment Law	
MGMT 341	Organizational Leadership	
MGMT 450	Internship	
SAFE 118	Introduction to Safety	
<b>Total Hours</b>		<b>18</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Minor in Human Resource Management (51H)

This program is effective as of Summer 2021.

Revised 10.28.2021

UCC 03.02.21

## Human Resource Management, Minor (Non-BSBA Majors)

The Human Resource Management minor provides excellent value for non BSBA students. The program offers essential knowledge in a solid introduction to HR systems and practices that offer the ability to become an HR manager. The HRM minor will broaden the learning experiences and professional opportunities of Business majors by creating a second focus in HR management. You will be prepared to work in the field of HRM in small, medium, and large organizations in either the public or private sector.

To access Minor Requirements, please view the Curriculum Guide tab.

### Related Links

Management: Human Resources Program Page ([https://www.sru.edu/academics/majors-and-minors/human-resource-management-\(minor\)/](https://www.sru.edu/academics/majors-and-minors/human-resource-management-(minor)/))

Management and Marketing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/management-and-marketing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

GPA: 2.0 or higher

### MINOR REQUIREMENTS

Code	Title	Hours
<b>Required Courses</b>		
MGMT 351	Organizational Behavior	3
MGMT 354	Human Resources Management	3
<b>HRM Minor (Core)</b>		
MGMT 364	Recruitment and Selection	3
MGMT 455	Compensation Management	3
MGMT 460	Training and Development	3
<b>Additional Courses</b>		
Select one of the following:		3
MGMT 341	Organizational Leadership	
MGMT 450	Internship	
MGMT 452	Management-Labor Relations	
<b>Total Hours</b>		<b>18</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Minor in Human Resource Management (51M)

This program is effective as of Summer 2021.

Revised 10.28.2021

UCC 03.02.21

## Management, Bachelor of Science in Business Administration (BSBA) - Concentration in General Management

### Policy for Changing to Management Major:

A Slippery Rock University student wishing to change their major to Management MUST have a minimum overall GPA of 2.0.

## Program Learning Outcomes

- **Critical Thinking and Problem Solving:** Students graduating with a degree in business administration will demonstrate effective critical thinking and problem-solving skills. Students will:
  - Apply critical thinking skills to analyze and interpret financial statements to judge business performance.
  - Apply critical thinking skills using quantitative techniques for problem solving and strategic decision making
- **Communication:** Students graduating with a degree in business administration will demonstrate competency in oral and written communication skills. Students will:
  - Prepare in proper format and style the following documents: business report (one to two pages), business memo, research report and presentation.
  - Deliver an effective oral presentation on a business and/or professional topic.
- **Information Technology:** Students will demonstrate proficiency in the use of computers and software to manage information with statistical analysis, spreadsheet, database, and other appropriate applications.
- **Ethics:** Students graduating with a degree in business administration will demonstrate an understanding of the legal environment and ethical standards of business and an awareness of the implications of their behavior and actions as a business professional. Students will apply an appropriate framework for examining ethical dilemmas and be able to (1) identify ethical issues and stakeholders, (2) evaluate alternative course(s) of action, and (3) formulate an appropriate action plan.

- **Professional Proficiency:** Students graduating with a degree in business administration will have acquired the necessary skills and knowledge to meet professional competencies as business professionals and global citizens. Students will:
  - Demonstrate an understanding of the history and vocabulary unique to business disciplines.
  - Demonstrate knowledge of procedures, concepts, and technical business skills through practical application (forecasting, budgeting, financial statement analyses, business plans, strategic planning).
  - Demonstrate the ability to read and interpret financial statements in the decision-making process.
  - Demonstrate effective teamwork and collaborative skills in a simulated business environment.

## Related Links

Management - General Management, BSBA Program Page (<https://www.sru.edu/academics/majors-and-minors/management-general-management/>)

Management and Marketing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/management-and-marketing/>)

Management On-line Completion Page (<https://catalog.sru.edu/undergraduate/business/management-marketing/management-bsba-online-degree-completion-program/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

Core GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42-43
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	63
	Electives	15

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
	Select one of the following:	3-4
MATH 117	Quantitative Reasoning	
MATH 123	Introduction to Applied Calculus	

MATH 225	Calculus I	
	Select one of the following:	3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
	Subtotal	15-16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
	Select 3 Credits (p. 29)	3
<i>Humanities Inquiry</i>		
	Select 3 Credits (p. 29)	3
<i>Social Science Inquiry</i>		
	Select 3 Credits (p. 29)	3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
	Subtotal	15
<b>Thematic Thread</b>		
	Select 12 Credits (p. 29) <sup>2</sup>	12
Required Thematic Thread Coursework:		
ECON 202	Principles of Microeconomics	
<b>Total Hours</b>		<b>42-43</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300-level or above.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
	Complete one of the following:	0-3
	Meet required minimum SAT or ACT math score OR	
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
	Demonstrate "computer competency" by one of the following:	0-3
	Pass Computer Competency Exam OR	
	Select one of the following at SRU or another post-secondary institution:	
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>



## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 35 major credits must be taken at SRU or PASSHE
- 35 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Basic Core Courses</b>		
ACCT 209	Financial Accounting <sup>1</sup>	3
ACCT 322	Business Analysis and Decision Making <sup>1</sup>	3
ACCT 340	Legal Environment of Business <sup>1</sup>	3
ECON 201	Principles of Macroeconomics <sup>1</sup>	3
ECON 219	Business Analytics I <sup>1</sup>	3
or MGMT 219	Business Analytics I	
ECON 319	Business Analytics II <sup>1</sup>	3
or MGMT 319	Business Analytics II	
FIN 320	Managerial Finance <sup>1</sup>	3
MGMT 303	Issues in Global Business <sup>1</sup>	3
or FIN 303	Issues in Global Business	
or MRKT 303	Issues in Global Business	
MGMT 320	Operations Management <sup>1</sup>	3
MGMT 351	Organizational Behavior <sup>1</sup>	3
MRKT 230	Principles of Marketing <sup>1</sup>	3
MGMT 458	Business Capstone <sup>1</sup>	3
MIS 265	Management Information Systems <sup>1</sup>	3
Subtotal		39
<b>Required Computer Science Course</b>		
CPSC 210	Productivity Software <sup>1</sup>	3
or MIS 210	Productivity Software	
Subtotal		3
<b>Required Management Courses</b>		
MGMT 354	Human Resources Management <sup>2</sup>	3
MGMT 454	Management Seminar <sup>2</sup>	3
MGMT 457	International Management <sup>2</sup>	3
Subtotal		9
<b>General Management Concentration Electives</b>		
<i>Required Courses</i>		
MGMT 456	Management and Society <sup>2</sup>	3
Plus select 3 courses from the following:		9
MGMT 341	Organizational Leadership <sup>2</sup>	
MGMT 352	Supply Chain Management <sup>2</sup>	
MGMT 357	International Operations Management <sup>2</sup>	
MGMT 370	Sustainable Entrepreneurship and Innovation <sup>2</sup>	
MGMT 451	Employment Law <sup>2</sup>	
or ACCT 451	Employment Law	
MGMT 459	Sustainable Business Consulting <sup>2</sup>	
MGMT 360	Total Quality Management <sup>2</sup>	
MGMT 364	Recruitment and Selection <sup>2</sup>	
MGMT 415	Supply Chain Analytics <sup>2</sup>	

MGMT 450	Internship <sup>2</sup>	
MGMT 452	Management-Labor Relations <sup>2</sup>	
MGMT 455	Compensation Management <sup>2</sup>	
MGMT 460	Training and Development <sup>2</sup>	
Subtotal		12
<b>Total Hours</b>		<b>63</b>

<sup>1</sup> Course counts for 50% of Major and not for Major GPA

<sup>2</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student clubs and organizations
4. Internships
5. Service-learning classes
6. Career education and development
7. Student leadership development
8. Student-faculty research
9. Volunteering
10. Job Shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MANAGEMENT - BSBA (2350)

Concentration in General Management (GEMG)

This program is effective as of Summer 2022

Revised 07.10.2022

UCC 3.1.22

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
MATH 117	Quantitative Reasoning	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3

ECON 201	Principles of Macroeconomics	3
MIS 210	Productivity Software	3
Optional		
ESAP 110	Beginning Algebra	
CPSC 100	Introduction to Computing for Liberal Arts (or Computer Competency Exam)	
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
SCI 101	Science of Life	3
Humanities Inquiry (p. 29)		3
Creative & Aesthetic Inquiry (p. 29)		3
ECON 202	Principles of Microeconomics	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
SCI 102	Understanding the Physical World	3
ECON 219 or MGMT 219	Business Analytics I or Business Analytics I	3
MIS 265	Management Information Systems	3
MRKT 230	Principles of Marketing	3
Declare a Thematic Thread <sup>3</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Thematic Thread Requirement (p. 29)		3
ACCT 209	Financial Accounting	3
MGMT 320	Operations Management	3
MGMT 351	Organizational Behavior	3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
Thematic Thread Requirement (p. 29)		3
ECON 319 or MGMT 319	Business Analytics II or Business Analytics II	3
FIN 303 or MRKT 303	Issues in Global Business or Issues in Global Business	3
MGMT 354	Human Resources Management	3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Thematic Thread Requirement (p. 29)		3
ACCT 322	Business Analysis and Decision Making	3
FIN 320	Managerial Finance	3
MGMT 450	Internship (OR MGMT Elective)	3
Elective		3
<b>Hours</b>		<b>15</b>

**Fourth Year****Fall**

Thematic Thread Requirement (p. 29)		3
ACCT 340	Legal Environment of Business	3
Management Elective		3
MGMT 457	International Management	3
MGMT 456	Management and Society	3
Optional		
MBA Course <sup>2</sup>		
MBA Course <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
MGMT 458	Business Capstone	3
MGMT 454	Management Seminar	3
Management Elective		3
Elective		3
Elective		3
Optional		
MBA Course <sup>2</sup>		
MBA Course <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> SRU Undergraduates who have earned 90 or more credits (including in-progress courses) with a minimum 2.75 GPA are eligible to apply, enroll, and earn graduate level credit. Credits earned are graduate level only, separate from the undergraduate credits earned for the degree and are not calculated in the student's undergraduate credit and grade point totals. See policy details here: Senior Undergraduate Students Earning Graduate Credit (<https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/>).

<sup>3</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 2350

Concentration Code: GEMG

Revised: 04.28.2022

# Management, Bachelor of Science in Business Administration (BSBA) - Concentration in Human Resources

## Policy for Changing to Management Major:

A Slippery Rock University student wishing to change their major to Management MUST have a minimum overall GPA of 2.0.

## Program Learning Outcomes

- **Critical Thinking and Problem Solving:** Students graduating with a degree in business administration will demonstrate effective critical thinking and problem-solving skills. Students will:
  - Apply critical thinking skills to analyze and interpret financial statements to judge business performance.
  - Apply critical thinking skills using quantitative techniques for problem solving and strategic decision making
- **Communication:** Students graduating with a degree in business administration will demonstrate competency in oral and written communication skills. Students will:
  - Prepare in proper format and style the following documents: business report (one to two pages), business memo, research report and presentation.
  - Deliver an effective oral presentation on a business and/or professional topic.
- **Information Technology:** Students will demonstrate proficiency in the use of computers and software to manage information with statistical analysis, spreadsheet, database, and other appropriate applications.
- **Ethics:** Students graduating with a degree in business administration will demonstrate an understanding of the legal environment and ethical standards of business and an awareness of the implications of their behavior and actions as a business professional. Students will apply an appropriate framework for examining ethical dilemmas and be able to (1) identify ethical issues and stakeholders, (2) evaluate alternative course(s) of action, and (3) formulate an appropriate action plan.
- **Professional Proficiency:** Students graduating with a degree in business administration will have acquired the necessary skills and knowledge to meet professional competencies as business professionals and global citizens. Students will:
  - Demonstrate an understanding of the history and vocabulary unique to business disciplines.
  - Demonstrate knowledge of procedures, concepts, and technical business skills through practical application (forecasting, budgeting, financial statement analyses, business plans, strategic planning).
  - Demonstrate the ability to read and interpret financial statements in the decision-making process.
  - Demonstrate effective teamwork and collaborative skills in a simulated business environment.

## Related Links

Management - Human Resources, BSBA Program Page (<https://www.sru.edu/academics/majors-and-minors/management-human-resources/>)

Management and Marketing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/management-and-marketing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

Core GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42-43
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	66
	Electives	12

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
Select one of the following:		3-4
MATH 117	Quantitative Reasoning	
MATH 123	Introduction to Applied Calculus	
MATH 225	Calculus I	
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15-16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		

SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
Required Thematic Thread Coursework:		
ECON 202	Principles of Microeconomics	
<b>Total Hours</b>		<b>42-43</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300-level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 33 major credits must be taken at SRU or PASSHE
- 33 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Basic Core Courses</b>		
ACCT 209	Financial Accounting <sup>1</sup>	3
ACCT 322	Business Analysis and Decision Making <sup>1</sup>	3
ACCT 340	Legal Environment of Business	3
ECON 201	Principles of Macroeconomics <sup>1</sup>	3
ECON 219	Business Analytics I <sup>1</sup>	3
or MGMT 219	Business Analytics I	
ECON 319	Business Analytics II <sup>1</sup>	3

or MGMT 319	Business Analytics II	
FIN 303	Issues in Global Business	3
or MGMT 303	Issues in Global Business	
or MRKT 303	Issues in Global Business	
FIN 320	Managerial Finance <sup>1</sup>	3
MGMT 320	Operations Management <sup>1</sup>	3
MGMT 351	Organizational Behavior <sup>1</sup>	3
MGMT 458	Business Capstone <sup>1</sup>	3
MIS 265	Management Information Systems <sup>1</sup>	3
MRKT 230	Principles of Marketing <sup>1</sup>	3
Subtotal		39

### Required Computer Science Course

CPSC 210	Productivity Software <sup>1</sup>	3
or MIS 210	Productivity Software	
Subtotal		3

### Required Management Courses

MGMT 354	Human Resources Management <sup>2</sup>	3
MGMT 454	Management Seminar <sup>2</sup>	3
MGMT 457	International Management <sup>2</sup>	3
Subtotal		9

### Human Resources Concentration Electives

#### Required Courses

MGMT 364	Recruitment and Selection <sup>2</sup>	3
MGMT 452	Management-Labor Relations <sup>2</sup>	3
MGMT 455	Compensation Management <sup>2</sup>	3
MGMT 460	Training and Development <sup>2</sup>	3
Plus select one from the following:		3
MGMT 341	Organizational Leadership <sup>2</sup>	
MGMT 450	Internship	
MGMT 456	Management and Society <sup>2</sup>	
Subtotal		15

**Total Hours** **66**

<sup>1</sup> Course counts for 50% of Major and not for Major GPA

<sup>2</sup> Course counts for 50% of Major and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student clubs and organizations
4. Internships
5. Service-learning classes
6. Career education and development
7. Student leadership development
8. Student-faculty research

9. Volunteering  
10. Job Shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MANAGEMENT - BSBA (2350)

Concentration in Human Resources (HURS)

This program is effective as of Summer 2022

Revised 07.06.2022

UCC 03.01.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
MATH 117 or MATH 123 or MATH 225	Quantitative Reasoning or Introduction to Applied Calculus or Calculus I	3
ESAP 101	FIRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ECON 201	Principles of Macroeconomics	3
MIS 210	Productivity Software	3
<b>Optional</b>		
ESAP 110	Beginning Algebra	
CPSC 100	Introduction to Computing for Liberal Arts (or Computer Competency Exam)	
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
SCI 101	Science of Life	3
Humanities Inquiry (p. 29)		3
Creative & Aesthetic Inquiry (p. 29)		3
ECON 202	Principles of Microeconomics	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
SCI 102	Understanding the Physical World	3
ECON 219 or MGMT 219	Business Analytics I or Business Analytics I	3
MIS 265	Management Information Systems	3

MRKT 230	Principles of Marketing	3
Declare a Thematic Thread <sup>3</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Thematic Thread Requirement (p. 29)		3
ACCT 209	Financial Accounting	3
MGMT 320	Operations Management	3
MGMT 351	Organizational Behavior	3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
Thematic Thread Requirement (p. 29)		3
ECON 319 or MGMT 319	Business Analytics II or Business Analytics II	3
FIN 303 or MRKT 303	Issues in Global Business or Issues in Global Business	3
MGMT 354	Human Resources Management	3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Thematic Thread Requirement (p. 29)		3
ACCT 322	Business Analysis and Decision Making	3
FIN 320	Managerial Finance	3
MGMT 460	Training and Development	3
MGMT 341 or MGMT 456	Organizational Leadership (or MGMT 450 Internship) or Management and Society	3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
Thematic Thread Requirement (p. 29)		3
ACCT 340	Legal Environment of Business	3
MGMT 452	Management-Labor Relations	3
MGMT 457	International Management	3
MGMT 364	Recruitment and Selection	3
<b>Optional</b>		
MBA Course <sup>2</sup>		
MBA Course <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
MGMT 458	Business Capstone	3
MGMT 454	Management Seminar	3
MGMT 455	Compensation Management	3
MGMT 456	Management and Society	3
Elective		3
<b>Optional</b>		
MBA Course <sup>2</sup>		
MBA Course <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>121</b>



- <sup>1</sup> \*Course offered in multiple subjects; cannot take course in first major subject.
- <sup>2</sup> SRU Undergraduates who have earned 90 or more credits (including in-progress courses) with a minimum 2.75 GPA are eligible to apply, enroll, and earn graduate level credit. Credits earned are graduate level only, separate from the undergraduate credits earned for the degree and are not calculated in the student's undergraduate credit and grade point totals. See policy details here: Senior Undergraduate Students Earning Graduate Credit (<https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/>).
- <sup>3</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.
- \* Students are encouraged to take ESAP 101 as a Free Elective.

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

Major Code: 2350

Concentration Code: HURS

Revised: 04.28.2022

## Management, Bachelor of Science in Business Administration (BSBA) - Concentration in Supply Chain Management

### Policy for Changing to Management Major:

A Slippery Rock University student wishing to change their major to Management MUST have a minimum overall GPA of 2.0.

### Program Learning Outcomes

- **Critical Thinking and Problem Solving:** Students graduating with a degree in business administration will demonstrate effective critical thinking and problem-solving skills. Students will:
  - Apply critical thinking skills to analyze and interpret financial statements to judge business performance.
  - Apply critical thinking skills using quantitative techniques for problem solving and strategic decision making
- **Communication:** Students graduating with a degree in business administration will demonstrate competency in oral and written communication skills. Students will:
  - Prepare in proper format and style the following documents: business report (one to two pages), business memo, research report and presentation.
  - Deliver an effective oral presentation on a business and/or professional topic.
- **Information Technology:** Students will demonstrate proficiency in the use of computers and software to manage information with statistical analysis, spreadsheet, database, and other appropriate applications.

- **Ethics:** Students graduating with a degree in business administration will demonstrate an understanding of the legal environment and ethical standards of business and an awareness of the implications of their behavior and actions as a business professional. Students will apply an appropriate framework for examining ethical dilemmas and be able to (1) identify ethical issues and stakeholders, (2) evaluate alternative course(s) of action, and (3) formulate an appropriate action plan.
- **Professional Proficiency:** Students graduating with a degree in business administration will have acquired the necessary skills and knowledge to meet professional competencies as business professionals and global citizens. Students will:
  - Demonstrate an understanding of the history and vocabulary unique to business disciplines.
  - Demonstrate knowledge of procedures, concepts, and technical business skills through practical application (forecasting, budgeting, financial statement analyses, business plans, strategic planning).
  - Demonstrate the ability to read and interpret financial statements in the decision-making process.
  - Demonstrate effective teamwork and collaborative skills in a simulated business environment.

### Related Links

Management - Supply Chain Management, BSBA Program Page (<https://www.sru.edu/academics/majors-and-minors/management-supply-chain-management/>)

Management and Marketing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/management-and-marketing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

Core GPA: 2.0 or higher

### SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	42-43
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	69
	Electives	9

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
	The Rock	
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3

ENGL 104	Critical Reading	3
Select one of the following:		3-4
MATH 117	Quantitative Reasoning	
MATH 123	Introduction to Applied Calculus	
MATH 225	Calculus I	
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15-16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
Required Thematic Thread Coursework:		
ECON 202	Principles of Microeconomics	
<b>Total Hours</b>		<b>42-43</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300-level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	

PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## MAJOR REQUIREMENTS

- 35 major credits must be taken at SRU or PASSHE
- 35 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Basic Core Courses</b>		
ACCT 209	Financial Accounting <sup>1</sup>	3
ACCT 322	Business Analysis and Decision Making <sup>1</sup>	3
ACCT 340	Legal Environment of Business <sup>1</sup>	3
ECON 201	Principles of Macroeconomics <sup>1</sup>	3
ECON 219	Business Analytics I <sup>1</sup>	3
or MGMT 219	Business Analytics I	
ECON 319	Business Analytics II <sup>1</sup>	3
or MGMT 319	Business Analytics II	
FIN 320	Managerial Finance <sup>1</sup>	3
MGMT 303	Issues in Global Business <sup>1</sup>	3
or MRKT 303	Issues in Global Business	
or FIN 303	Issues in Global Business	
MGMT 320	Operations Management <sup>1</sup>	3
MGMT 351	Organizational Behavior <sup>1</sup>	3
MGMT 458	Business Capstone <sup>1</sup>	3
MIS 265	Management Information Systems <sup>1</sup>	3
MRKT 230	Principles of Marketing <sup>1</sup>	3
Subtotal		39
<b>Required Computer Science Course</b>		
CPSC 210	Productivity Software <sup>1</sup>	3
or MIS 210	Productivity Software	
Subtotal		3
<b>Required Management Courses</b>		
MGMT 354	Human Resources Management <sup>2</sup>	3
MGMT 454	Management Seminar <sup>2</sup>	3
MGMT 457	International Management <sup>2</sup>	3
Subtotal		9
<b>Supply Chain Management Concentration Electives</b>		
<i>Required Courses</i>		
MGMT 352	Supply Chain Management	3
MGMT 415	Supply Chain Analytics	3
MRKT 331	Distribution Management <sup>2</sup>	3
MRKT 332	Business Marketing <sup>2</sup>	3
Plus select 2 courses from the following:		6
MRKT 335	Retail Management <sup>2</sup>	
MGMT 357	International Operations Management <sup>2</sup>	
MGMT 360	Total Quality Management <sup>2</sup>	
MGMT 450	Internship <sup>2</sup>	
MIS 323	Data Base Systems <sup>2</sup>	

or CPSC 323	Fundamentals of Database Systems	
MIS 443	Project Management <sup>2</sup>	
Subtotal		18
<b>Total Hours</b>		<b>69</b>

- <sup>1</sup> Course counts for 50% of Major and not for Major GPA
- <sup>2</sup> Course counts for 50% of Major requirements and Major GPA
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MANAGEMENT - BSBA (2350)  
Concentration in Supply Chain Management (SCMG)  
This program is effective as of Fall 2022  
Revised 03.31.2022  
UCC 11.30.2021

## RECOMMENDED FOUR-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
MATH 117	Quantitative Reasoning	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ECON 201	Principles of Macroeconomics	3
MIS 210	Productivity Software	3
<b>Optional</b>		
ESAP 110	Beginning Algebra	
CPSC 100	Introduction to Computing for Liberal Arts (or Computer Competency Exam)	
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
SCI 101	Science of Life	3
Humanities Inquiry (p. 29)		3
Creative & Aesthetic Inquiry (p. 29)		3
ECON 202	Principles of Microeconomics	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	

PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
SCI 102	Understanding the Physical World	3
ECON 219	Business Analytics I	3
or MGMT 219	or Business Analytics I	
MIS 265	Management Information Systems	3
MRKT 230	Principles of Marketing	3
Declare a Thematic Thread <sup>3</sup>		
<b>Hours</b>		<b>15</b>

### Spring

Thematic Thread Requirement (p. 29)		3
ACCT 209	Financial Accounting	3
MGMT 320	Operations Management	3
MGMT 351	Organizational Behavior	3
Elective <sup>4</sup>		3
<b>Hours</b>		<b>15</b>

### Third Year

#### Fall

Thematic Thread Requirement (p. 29)		3
ECON 319	Business Analytics II	3
or MGMT 319	or Business Analytics II	
FIN 303	Issues in Global Business	3
or MRKT 303	or Issues in Global Business	
MGMT 354	Human Resources Management	3
MRKT 332	Business Marketing	3
<b>Hours</b>		<b>15</b>

#### Spring

Thematic Thread Requirement (p. 29)		3
ACCT 322	Business Analysis and Decision Making	3
FIN 320	Managerial Finance	3
MRKT 450	Internship (Or Marketing Elective)	3
MGMT 352	Supply Chain Management	3
<b>Hours</b>		<b>15</b>

### Fourth Year

#### Fall

Thematic Thread Requirement (p. 29)		3
ACCT 340	Legal Environment of Business	3
MRKT 331	Distribution Management	3
MGMT 457	International Management	3
Elective <sup>4</sup>		3
<b>Optional</b>		

MBA Course <sup>2</sup>

MBA Course <sup>2</sup>

**Hours** **15**

#### Spring

MGMT 458	Business Capstone	3
MGMT 454	Management Seminar	3
MGMT 415	Supply Chain Analytics	3
Management Elective		3
Elective <sup>4</sup>		3
<b>Optional</b>		
MBA Course <sup>2</sup>		

MBA Course<sup>2</sup>

Hours	15
Total Hours**	121

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> SRU Undergraduates who have earned 90 or more credits (including in-progress courses) with a minimum 2.75 GPA are eligible to apply, enroll, and earn graduate level credit. Credits earned are graduate level only, separate from the undergraduate credits earned for the degree and are not calculated in the student's undergraduate credit and grade point totals. See policy details here: Senior Undergraduate Students Earning Graduate Credit (<https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/>).

<sup>3</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>4</sup> Students are encouraged to take the following courses for electives: MRKT 334, MRKT 335, MRKT 336, MRKT 338, MRKT 450 and/or HCAM 415

\* Students are encouraged to take ESAP 101 as a Free Elective.

Major Code: 2350

Revised: 04.28.2022

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

## Management, Bachelor of Science in Business Administration (BSBA) - Online Degree Completion Program

### Policy for Changing to Management Major:

A Slippery Rock University student wishing to change their major to the Management Online BS degree completion programs MUST have a minimum overall GPA of 2.0.

### Program Learning Outcomes

- **Critical Thinking and Problem Solving:** Students graduating with a degree in business administration will demonstrate effective critical thinking and problem-solving skills. Students will:
  - Apply critical thinking skills to analyze and interpret financial statements to judge business performance.
  - Apply critical thinking skills using quantitative techniques for problem solving and strategic decision making
- **Communication:** Students graduating with a degree in business administration will demonstrate competency in oral and written communication skills. Students will:
  - Prepare in proper format and style the following documents: business report (one to two pages), business memo, research report and presentation.
  - Deliver an effective oral presentation on a business and/or professional topic.

- **Information Technology:** Students will demonstrate proficiency in the use of computers and software to manage information with statistical analysis, spreadsheet, database, and other appropriate applications.

- **Ethics:** Students graduating with a degree in business administration will demonstrate an understanding of the legal environment and ethical standards of business and an awareness of the implications of their behavior and actions as a business professional. Students will apply an appropriate framework for examining ethical dilemmas and be able to (1) identify ethical issues and stakeholders, (2) evaluate alternative course(s) of action, and (3) formulate an appropriate action plan.

- **Professional Proficiency:** Students graduating with a degree in business administration will have acquired the necessary skills and knowledge to meet professional competencies as business professionals and global citizens. Students will:
  - Demonstrate an understanding of the history and vocabulary unique to business disciplines.
  - Demonstrate knowledge of procedures, concepts, and technical business skills through practical application (forecasting, budgeting, financial statement analyses, business plans, strategic planning).
  - Demonstrate the ability to read and interpret financial statements in the decision-making process.
  - Demonstrate effective teamwork and collaborative skills in a simulated business environment.

## Related Links

Online Degree Completion Information (<https://www.sru.edu/academics/online-learning/online-degree-completion-ug-programs/>)

Management and Marketing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/management-and-marketing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

Core GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	66
	Electives	12

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>Basic Core Courses</b>		
Complete 33-39 credits		33-39
ECON 201	Principles of Macroeconomics <sup>1</sup>	3
ECON 202	Principles of Microeconomics <sup>1</sup>	3
<b>Total Hours</b>		<b>45</b>

<sup>1</sup> Indicates that SRU assumes to be completed as part of an associate degree

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 33 major credits must be taken at SRU or another PASSHE University
- SRU course offerings for this online Management program are based on the assumption that the student has completed minimum course competencies and an associate degree in business administration, which is comprised of most of the Management Basic Core Requirements and many Rock Studies 2 Requirements. Because associate degree curricula varies from transfer institution to institution, and because each online student transfers to SRU with a unique record of transfer courses and SRU degree completion needs, it is important for students to plan ahead for course offerings each term and to register as early as possible for each subsequent SRU semester/term.

Code	Title	Hours
<b>Basic Core Courses</b>		
ECON 201	Principles of Macroeconomics <sup>1,2,3</sup>	3
ECON 202	Principles of Microeconomics <sup>1,2,3</sup>	3
ACCT 209	Financial Accounting <sup>1,3</sup>	3
ACCT 322	Business Analysis and Decision Making <sup>1</sup>	3
ECON 219	Business Analytics I <sup>1,3</sup>	3
or MGMT 219	Business Analytics I	
ECON 319	Business Analytics II <sup>1</sup>	3
or MGMT 319	Business Analytics II	
MGMT 320	Operations Management <sup>1</sup>	3
MRKT 230	Principles of Marketing <sup>1,3</sup>	3
MGMT 351	Organizational Behavior <sup>1</sup>	3
MGMT 303	Issues in Global Business	3
or FIN 303	Issues in Global Business	
FIN 320	Managerial Finance	3
ACCT 340	Legal Environment of Business	3
MGMT 458	Business Capstone <sup>1</sup>	3
MIS 265	Management Information Systems <sup>1</sup>	3
Subtotal		42
<b>Required Computer Science Course</b>		
MIS 210	Productivity Software <sup>1,3</sup>	3
Subtotal		3
<b>Required Management Course</b>		
MGMT 354	Human Resources Management <sup>4</sup>	3
MGMT 454	Management Seminar <sup>4</sup>	3
MGMT 456	Management and Society <sup>4</sup>	3
MGMT 457	International Management <sup>4</sup>	3
Subtotal		12
<b>Business Electives</b>		
Select three of the following:		9
MGMT 370	Sustainable Entrepreneurship and Innovation <sup>4</sup>	
MGMT 451	Employment Law <sup>4</sup>	
or ACCT 451	Employment Law	
MGMT 459	Sustainable Business Consulting <sup>4</sup>	
MGMT 341	Organizational Leadership <sup>4</sup>	
MGMT 352	Supply Chain Management <sup>4</sup>	
MGMT 357	International Operations Management <sup>4</sup>	
MGMT 360	Total Quality Management <sup>4</sup>	
MGMT 364	Recruitment and Selection <sup>4</sup>	
MGMT 415	Supply Chain Analytics <sup>4</sup>	
MGMT 450	Internship <sup>4</sup>	
MGMT 452	Management-Labor Relations <sup>4</sup>	
MGMT 455	Compensation Management <sup>4</sup>	
MGMT 460	Training and Development <sup>4</sup>	
Subtotal		9
<b>Total Hours</b>		<b>66</b>

<sup>1</sup> Course counts for 50% of Major and not for Major GPA

<sup>2</sup> Course maybe counted as both a Major and Rock Studies 2 Requirement, but earns credit only once toward the 120-credits total.



<sup>3</sup> Indicates that SRU assumes to be completed as part of an associate degree.

<sup>4</sup> Course counts for 50% of Major and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MANAGEMENT - BSBA (2347)

This program is effective as of Fall 2019.

Revised 12.13.2021

UCC 11.30.2021

## Management, Minor (BSBA majors)

The Business Administration minor provides excellent value for BSBA students. The program offers essential knowledge in business functional areas such as Accounting, Finance, Management, and Marketing. The Business Administration minor not only enhances students' career readiness but also cultivates future entrepreneurs.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Management, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/management-general-management/>)

Management and Marketing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/management-and-marketing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

(Only School of Business Program Students may declare: ACCT, ECON, FIN, HCAM, IS, MGMT and MRKT)

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Courses</b>		
FIN 320	Managerial Finance	3
MGMT 320	Operations Management	3
MGMT 351	Organizational Behavior	3
MGMT 354	Human Resources Management	3
MGMT 457	International Management	3
MRKT 230	Principles of Marketing	3
Select two of the following Management courses: <sup>1</sup>		6
300/400 level MGMT course		
300/400 level MGMT course		
<b>Total Hours</b>		<b>24</b>

<sup>1</sup> Business core courses may not be used as electives.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN MANAGEMENT for SBUS Program Students - (51C)

This program is effective as of Fall 2019.

Revised 07.26.2021

UCC 3.26.2019

## Marketing, Bachelor of Science in Business Administration (BSBA)

### Policy for Changing to Marketing Major:

A Slippery Rock University student wishing to change their major to Marketing MUST have a minimum overall GPA of 2.0.

## Program Learning Outcomes

- **Critical Thinking and Problem Solving:** Students graduating with a degree in business administration will demonstrate effective critical thinking and problem-solving skills. Students will:
  - Apply critical thinking skills to analyze and interpret financial statements to judge business performance.
  - Apply critical thinking skills using quantitative techniques for problem solving and strategic decision making
- **Communication:** Students graduating with a degree in business administration will demonstrate competency in oral and written communication skills. Students will:
  - Prepare in proper format and style the following documents: business report (one to two pages), business memo, research report and presentation.

- Deliver an effective oral presentation on a business and/or professional topic.
- **Information Technology:** Students will demonstrate proficiency in the use of computers and software to manage information with statistical analysis, spreadsheet, database, and other appropriate applications.
- **Ethics:** Students graduating with a degree in business administration will demonstrate an understanding of the legal environment and ethical standards of business and an awareness of the implications of their behavior and actions as a business professional. Students will apply an appropriate framework for examining ethical dilemmas and be able to (1) identify ethical issues and stakeholders, (2) evaluate alternative course(s) of action, and (3) formulate an appropriate action plan.
- **Professional Proficiency:** Students graduating with a degree in business administration will have acquired the necessary skills and knowledge to meet professional competencies as business professionals and global citizens. Students will:
  - Demonstrate an understanding of the history and vocabulary unique to business disciplines.
  - Demonstrate knowledge of procedures, concepts, and technical business skills through practical application (forecasting, budgeting, financial statement analyses, business plans, strategic planning).
  - Demonstrate the ability to read and interpret financial statements in the decision-making process.
  - Demonstrate effective teamwork and collaborative skills in a simulated business environment.

## Related Links

Marketing, BSBA Program Page (<https://www.sru.edu/academics/majors-and-minors/marketing/>)

Management and Marketing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/management-and-marketing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

Core GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42-43
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	66
	Electives	12

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUB 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
Select one of the following:		3-4
MATH 117	Quantitative Reasoning	
MATH 123	Introduction to Applied Calculus	
MATH 225	Calculus I	
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15-16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
Required Thematic Thread Coursework:		
ECON 202	Principles of Microeconomics	
<b>Total Hours</b>		<b>42-43</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300-level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		

Select one of the following at SRU or another post-secondary institution:

CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Basic Core Courses</b>		
ACCT 209	Financial Accounting <sup>1</sup>	3
ACCT 322	Business Analysis and Decision Making <sup>1</sup>	3
ACCT 340	Legal Environment of Business <sup>1</sup>	3
ECON 201	Principles of Macroeconomics <sup>1</sup>	3
ECON 219	Business Analytics I <sup>1</sup>	3
or MGMT 219	Business Analytics I	
ECON 319	Business Analytics II <sup>1</sup>	3
or MGMT 319	Business Analytics II	
FIN 320	Managerial Finance <sup>1</sup>	3
MGMT 320	Operations Management <sup>1</sup>	3
MGMT 351	Organizational Behavior <sup>1</sup>	3
MRKT 230	Principles of Marketing <sup>1</sup>	3
MGMT 303	Issues in Global Business <sup>1</sup>	3
or FIN 303	Issues in Global Business	
or MRKT 303	Issues in Global Business	
MGMT 458	Business Capstone <sup>1</sup>	3
MIS 265	Management Information Systems <sup>1</sup>	3
Subtotal		39
<b>Required Computer Science Course</b>		
CPSC 210	Productivity Software <sup>1</sup>	3
or MIS 210	Productivity Software	
Subtotal		3
<b>Required Marketing Courses</b>		
MRKT 332	Business Marketing <sup>2</sup>	3
MRKT 333	Consumer Behavior <sup>2</sup>	3
MRKT 430	Marketing Research <sup>2</sup>	3
MRKT 431	Marketing Seminar <sup>2</sup>	3
MRKT 437	International Marketing <sup>2</sup>	3
Subtotal		15
<b>Marketing Electives</b>		
Select three of the following:		9
MRKT 331	Distribution Management <sup>2</sup>	
MRKT 334	Advertising Management <sup>2</sup>	

MRKT 335	Retail Management <sup>2</sup>
MRKT 336	Professional Selling <sup>2</sup>
MRKT 338	E-Commerce <sup>2</sup>
MRKT 390	Experimental <sup>2</sup>
MRKT 425	Marketing Analytics
MRKT 450	Internship <sup>2</sup>
MRKT 490	Independent Study <sup>2</sup>
Subtotal	9
<b>Total Hours</b>	<b>66</b>

<sup>1</sup> Course counts for 50% of Major and not for Major GPA

<sup>2</sup> Course counts for 50% of Major and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student clubs and organizations
4. Internships
5. Service-learning classes
6. Career education and development
7. Student leadership development
8. Student-faculty research
9. Volunteering
10. Job Shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MARKETING - BSBA (2343)

This program is effective as of Summer 2022

Revised 10.20.22

UCC 04.19.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
MATH 117	Quantitative Reasoning	3

ESAP 101	FIRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ECON 201	Principles of Macroeconomics	3
MIS 210	Productivity Software	3
Optional		
ESAP 110	Beginning Algebra	
CPSC 100	Introduction to Computing for Liberal Arts (or Computer Competency Exam)	
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
SCI 101	Science of Life	3
Humanities Inquiry (p. 29)		3
Creative & Aesthetic Inquiry (p. 29)		3
ECON 202	Principles of Microeconomics	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
SCI 102	Understanding the Physical World	3
ECON 219 or MGMT 219	Business Analytics I or Business Analytics I	3
MIS 265	Management Information Systems	3
MRKT 230	Principles of Marketing	3
Declare a Thematic Thread <sup>3</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Thematic Thread Requirement (p. 29)		3
ACCT 209	Financial Accounting	3
MGMT 320	Operations Management	3
MGMT 351	Organizational Behavior	3
Elective <sup>4</sup>		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
Thematic Thread Requirement (p. 29)		3
ECON 319 or MGMT 319	Business Analytics II or Business Analytics II	3
FIN 303 or MRKT 303	Issues in Global Business or Issues in Global Business	3
MRKT 332	Business Marketing	3
Elective <sup>4</sup>		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Thematic Thread Requirement (p. 29)		3
ACCT 322	Business Analysis and Decision Making	3
FIN 320	Managerial Finance	3
MRKT 333	Consumer Behavior	3
MRKT 450	Internship (Or Marketing Elective)	3
<b>Hours</b>		<b>15</b>

**Fourth Year****Fall**

Thematic Thread Requirement (p. 29)		3
ACCT 340	Legal Environment of Business	3
MRKT 430	Marketing Research	3
MRKT 437	International Marketing	3
Elective <sup>4</sup>		3
Optional		
MBA Course <sup>2</sup>		
MBA Course <sup>2</sup>		
<b>Hours</b>		<b>15</b>

**Spring**

MGMT 458	Business Capstone	3
MRKT 431	Marketing Seminar	3
Elective <sup>4</sup>		3
Elective <sup>4</sup>		3
Elective <sup>4</sup>		3
Optional		
MBA Course <sup>2</sup>		
MBA Course <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> SRU Undergraduates who have earned 90 or more credits (including in-progress courses) with a minimum 2.75 GPA are eligible to apply, enroll, and earn graduate level credit. Credits earned are graduate level only, separate from the undergraduate credits earned for the degree and are not calculated in the student's undergraduate credit and grade point totals. See policy details here: Senior Undergraduate Students Earning Graduate Credit (<https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/>).

<sup>3</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>4</sup> Students are encouraged to take the following courses for electives: MRKT 334, MRKT 335, MRKT 336, MRKT 338, MRKT 450 and/or HCAM 415

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 2343

Revised: 04.28.2022

## Marketing, Minor

Marketing is at the core of many decisions in a company AND it is more than selling goods or services. It is a collection of skills that are useful in any career. No matter what major you have, knowing who your customer is and how to communicate with that business or consumer, to solve their problems, totally depends on marketing. No company can be successful

without understanding how to address the wants and needs of their customers and a minor in marketing will help you in that role no matter what job you have.

With a marketing minor, you learn how imperative the 4Ps of marketing (product, price, promotion and placement/distribution) combine to solve customers' problems with the right product, at the price, using the right incentive and communication (promotions), at the right place and time.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Marketing, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/marketing/>)

Management and Marketing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/management-and-marketing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

**Curriculum Guide**

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU.
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Courses</b>		
MRKT 230	Principles of Marketing	3
MRKT 332	Business Marketing	3
MRKT 333	Consumer Behavior	3
MRKT 437	International Marketing	3
<b>Elective</b>		
Select two 300 or 400 level course:		6
MRKT 300/400	MRKT 300/400 level courses	
<b>Total Hours</b>		<b>18</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN MARKETING - (51F)

This program is effective in Summer 2022

Revised 05.31.2022

UCC 03.01.2022

## Sustainable Management, Minor (BSBA majors only)

Since the formation of the United Nations Global Compact and the release of the seventeen United Nations Sustainable Development Goals, business has increasingly become viewed as having potential to be a force for good. A minor in sustainable management provides an opportunity for students to learn the basic tenets of sustainability through the lens of the SDGs and triple bottom line (people, planet and profit) and management.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Sustainable Management, Minor Program Page ([https://www.sru.edu/academics/majors-and-minors/sustainable-management-\(minor\)/](https://www.sru.edu/academics/majors-and-minors/sustainable-management-(minor)/))

Management and Marketing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/management-and-marketing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

2.0 or higher Minor GPA

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU.
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above).
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Courses</b>		
ECON 202	Principles of Microeconomics	3
ECON 315	Economics of Sustainable Development	3
MGMT 351	Organizational Behavior	3
BIOL 105	Environmental Biology	3
or EGEO 100	Environmental Geology	
<b>Internship or Business Consulting</b>		
Course not selected in this block may be taken as an elective below		
MGMT 449	Sustainable Management Internship	3
or MGMT 459	Sustainable Business Consulting	
<b>Elective Courses</b>		
Select nine credits:		9
MGMT 370	Sustainable Entrepreneurship and Innovation	



MGMT 459	Sustainable Business Consulting
MGMT 352	Supply Chain Management
MGMT 449	Sustainable Management Internship
ACCT 451	Employment Law
or MGMT 451	Employment Law
MGMT 456	Management and Society
MRKT 338	E-Commerce

**Total Hours****24**

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN SUSTAINABLE MANAGEMENT (51J)

For BSBA students

This program is effective as of Fall 2019.

Revised 6-2019

UCC 3.26.2019

## Military Science (Army ROTC)

Chair	Secretary	Location	Department Phone
LTC Jennifer Martin	Becky Lindey	101 Lowry Center	724-738-2019

Department Web Site URL ([http://www.sru.edu/academics/colleges-and-departments/cob/departments/military-science-\(rotc\)/](http://www.sru.edu/academics/colleges-and-departments/cob/departments/military-science-(rotc)/))

## The Rock Difference

The Department of Military Science (Army ROTC) provides a program of leadership development, which prepares college students for service as Officers in the United States Army. After graduation, they serve as commissioned officers on active duty, or as an officer in an Army Reserve or National Guard unit. These officers possess self-confidence, self-discipline, physical stamina, poise, and other attributes essential to leaders of character – one who is prepared to serve the nation or the commonwealth both in and out of uniform.

## Faculty

**LTC Jennifer Martin** - Department Chairperson/Professor of Military Science

**CPT Adam Readout** - Assistant Professor of Military Science

**Mr. Bret Rogowitz** - Enrollment Officer/Assistant Professor of Military Science

**Mr. Bill Perez** - Instructor

**Mr. Andrew Leonhard** - Instructor

**Mr. Chris Wolf** - Human Resources

**Mr. Dan Renaud** - Supply Technician

**CPT Stephen Peters** - Assistant Professor of Military Science

**SFC Henry Devries** - Assistant Professor of Military Science

**SFC Ryan Graeves** - National Guard Recruiter

**SGT Michael Lavan** - National Guard Recruiter

## Programs

- Army ROTC (p. 98)

## Courses

### MS 100 - The American Military Experience

Establishes a framework of reference regarding military service, an understanding of the profession of arms and its impact on and place in American society. The course begins the Army's leadership development process. Includes a lab. ++

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Human Diversity & Well-Being, Transfer Thread

Completion Course, United States in Global Context

### MS 102 - Principles of Leadership

This course continues the student's introduction to the military organization and begins to teach leadership techniques and principles using military situations as a point of reference. Various academic studies of civilian-based leadership theories and styles are examined and compared to military theories and styles. Includes a lab. ++

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

### MS 139 - Foundations of Academic Discovery

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

### MS 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

### MS 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**MS 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MS 201 - Basic Military Skills**

Begins to teach basic military skills such as map reading, land navigation using a map and compass, first aid, weapons marksmanship, drill and small unit tactics. Includes a lab. ++

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**MS 202 - Intermediate Military Skills**

Continues instruction in map reading, land navigation using a map and compass, first aid, weapons marksmanship, drill and small unit tactics. Begins to integrate all skills into leading small units in tactical situations. Includes a lab. ++

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**MS 209 - Evolution of Modern Military Art**

A survey of the development of all branches of the American military spanning the colonial period to present day, this course includes a brief introduction to the development of the western way of war from pre-Hellenistic conflict through the Middle Ages in Europe. Technological innovation, evolution of tactical through strategic levels of warfare, and the symbiotic relationship between military development, national policy, and societal expectations will be examined.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MS 250 - ROTC Basic Leadership Practicum**

A five week experience of training and evaluation conducted in a tactical framework at Fort Knox, Kentucky. Students learn basic military skills which enable them to take advanced military science courses on campus.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MS 280 - Leadership Seminar**

This course involves individualized instruction, research and presentation on research in areas required to fill in a students knowledge base to be able to move into the ROTC advanced course. This course may be taken only once.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MS 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MS 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**MS 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MS 301 - Fundamentals of Tactical Operations**

Focuses on tactics at the squad level. Students learn the troop leading procedures and how to give both oral and written operations orders. Students continue to enhance their skills at land navigation and rifle marksmanship. Physical fitness conditioning is a mandatory part of the laboratory. Includes a lab. ++

Credits: 4

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MS 302 - Advanced Military Skills**

Continues development of intermediate level cadet leader skills in preparation for attendance at the Leadership Development and Assessment Course at Ft. Lewis, Washington. The course is supplementary in scope and includes leadership, written and oral communications, operations and tactics, land navigation, weapons, and radio and wire communications subjects. A laboratory experience is required. ++

Credits: 4

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MS 350 - ROTC Advanced Leadership Practicum**

A five week experience of training and evaluation conducted in a tactical framework at Fort Lewis, Washington. Cadets demonstrate and learn advanced military skills. Cadets also demonstrate their leadership skills in a variety of leadership positions in tactical and non-tactical environments.

Prerequisites: MS 301<sup>D</sup> and MS 302<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MS 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MS 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MS 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MS 401 - Leadership Dimensions and Concepts**

This course begins the transition from cadet to officer. Focus is on organization of the Army, command and staff functions, officer and noncommissioned officer evaluation system, military law and development of training. Students participate in a staff ride to a significant military battlefield. Includes a lab. ++

Credits: 4

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MS 402 - Officership and the Profession of Arms**

This course continues the transition from cadet to officer. Students begin a critical analysis of the role of the officer and the noncommissioned officer, and their interaction, at the platoon, company and battalion level. Students are introduced to joint operations and conduct some critical analysis of national military policy. Includes a lab. ++

Credits: 4

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MS 450 - The Cadet Troop Leadership Internship**

A three-week experience as a leader in a U.S. Army unit, under the close supervision of a U.S. Army lieutenant or captain. It gives the student the opportunity to lead real soldiers in a real U.S. Army unit. The intern will actually supervise the planning and execution of the unit's scheduled training.

Prerequisites: MS 301<sup>D</sup> and MS 302<sup>D</sup> and MS 350<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MS 490 - Independent Study**

In-depth reading and research in an area of particular interest to the student with the guidance of an individual faculty member. This course may be taken only once. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MS 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MS 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Army ROTC

### Requirements for Enrollment

The general requirements for enrollment in Army ROTC stipulate that students be accepted as a regularly enrolled university student and be a citizen of the United States. Veterans and JROTC graduates may receive exemptions from the basic course as approved by the Professor of Military Science (PMS). For continuation in ROTC during the junior and senior years, students must have a 2.500 grade point average in their academic area, have successfully completed requirements for the Basic Course, pass a physical examination, and be accepted by the PMS. Advanced Course students must agree in writing to complete the junior and senior years.

## Army ROTC Scholarship/Financial Assistance

Army ROTC offers two-year, three-year, and four-year scholarships on a competitive basis to the most outstanding students who apply. Three and two-year scholarships are awarded to students already enrolled in college. Students who attend the LTC in the two-year program may compete for two-year scholarships.

Each scholarship pays for college tuition and required educational fees and provides a specified amount for textbooks. Each scholarship also includes subsistence allowance of \$3,500-\$5,000 for every year the scholarship is in effect.

All cadets in the Advanced Course receive a subsistence allowance of \$4,500-\$5,000 for each of the two years (This is not in addition to the subsistence allowance provided to scholarship recipients), as well as pay

for attending the five-week Leadership Development and Assessment Course during the summer between their Junior and Senior years.

## The Simultaneous Membership Program

Students who have not been awarded an ROTC scholarship can get a head start on their military careers and their future through the Simultaneous Membership Program (SMP). This program allows students to be members of the Army National Guard or the Army Reserve and Army ROTC at the same time.

SMP students are paid at the rate of at least a Sergeant (E-5) for their guard or reserve training assemblies, plus the aforementioned allowance from the ROTC Advanced Course. SMP students may also be eligible for additional federal and state educational benefits. They serve as officer trainees in their guard or reserve units and, under the close supervision of a commissioned officer, perform duties commensurate with those of a Second Lieutenant.

Cadets who successfully complete the SMP program graduate with a commission as a Second Lieutenant. Once commissioned, they may continue to serve in their Army National Guard or Army Reserve units, or they may apply for active duty in the U.S. Army.

Students can be in the SMP program all four years at college. They will be paid at the rate of Sergeant for only the final three years.

## The Two-Year Program

The two-year program is designed for junior students and community college graduates, students at four-year colleges who did not take ROTC during their first two years of school, or students entering a two-year post-baccalaureate or graduate course of study.

To enter the two-year program, students must first attend a fully-paid five-week Leadership Training Course (LTC), normally held during the summer between the sophomore and junior years of college. At LTC, students learn to challenge themselves physically and mentally, and to build their confidence and self-respect.

After they have successfully completed LTC, students who meet all necessary enrollment requirements may enroll in the Advanced Course.

Students who have attended basic training/AIT also qualify for the two-year program.

## The Four-Year Program

The four-year program is divided into two parts: the Basic Course and the Advanced Course.

The Basic Course is usually taken during the first two years of college and covers such subjects as customs, traditions and organizations of the service, national defense, military history, and leadership development. In addition, a variety of outside social and professional enrichment activities are available. All necessary ROTC textbooks, uniforms, and other essential materials for the Basic Course are furnished at no cost. After completion of the Basic Course, students who have demonstrated the potential to become an officer and who have met the physical and scholastic standards are eligible to enroll in the Advanced Course. (Note: There is no military service obligation associated with taking any Basic Course electives. All electives earn academic credit.)

## Military Science

Code	Title	Hours
<b>Freshman Year</b>		
MS 100	The American Military Experience	3
MS 102	Principles of Leadership	3
<b>Sophomore Year</b>		
MS 201	Basic Military Skills	3
MS 202	Intermediate Military Skills	3
<b>Junior Year</b>		
MS 301	Fundamentals of Tactical Operations	4
MS 302	Advanced Military Skills	4
<b>Senior Year</b>		
MS 401	Leadership Dimensions and Concepts	4
MS 402	Officership and the Profession of Arms	4
<b>Required Course (Any Year)</b>		<b>3</b>
HIST 304	American Military History	3
<b>Total Hours</b>		<b>34</b>

## Safety Management

Chair	Secretary	Location	Department Phone
Dr. Joseph Cali	April Coleman	106 Strain Safety Building	724-738-2017

Department Web Site URL (<http://www.sru.edu/academics/colleges-and-departments/cob/departments/safety-management/>)

Department Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/safety-fs.pdf>)

## Faculty

### Michael Adamczyk

Assistant Professor  
Safety Management

M.S., Eastern Kentucky University  
B.S., Slippery Rock University

### Angela Bernardo

Associate Professor  
Safety Management

Ph.D., Indiana University of Pennsylvania  
M.S., West Virginia University  
B.S., Slippery Rock University

### Joseph Cali

Professor  
Safety Management  
Ed.D., West Virginia University  
M.A., Indiana University of Pennsylvania  
B.A., Indiana University of Pennsylvania

### James Culligan

Instructor  
Safety Management  
M.S., West Virginia University  
B.S., Slippery Rock University

### Hope Dropp

Assistant Professor

Safety Management  
M.S., Geneva College  
B.S., Slippery Rock University

**Joseph Losko**  
Assistant Professor  
Safety Management  
D.S., Robert Morris University  
M.B.A., Waynesburg College  
B.S., Slippery Rock University

**David McCall**  
Instructor  
Safety Management  
M.S., University of Findlay  
B.S., Slippery Rock University

**Cindy Medford**  
Assistant Professor  
Safety Management  
M.A., University of Phoenix  
B.S., Murray State University

**David Renz**  
Assistant Professor  
Safety Management  
M.B.A., Northern Illinois University  
B.S., Indiana University of PA

**Rona Smeak**  
Associate Professor  
Safety Management  
Ph.D., Indiana University of PA  
M.B.A., Frostburg State University  
B.S., Slippery Rock University

## Programs

### Majors

- Safety Management, Bachelor of Science (BS) (p. 103)

## Courses

### SAFE 118 - Introduction to Safety

Examines basic safety practices, incident causal factors, and preventative measures.

Credits: 3  
Term(s) Typically Offered: Offered Every Term

### SAFE 139 - Foundations of Academic Discovery

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3  
Term(s) Typically Offered: Offered as Needed  
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.  
Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

### SAFE 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3  
Term(s) Typically Offered: Offered as Needed  
Enrollment is limited to students with a major in Safety Management.

### SAFE 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6  
Term(s) Typically Offered: Offered as Needed  
Enrollment is limited to students with a major in Safety Management.

### SAFE 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3  
Term(s) Typically Offered: Offered as Needed  
Enrollment is limited to students with a major in Safety Management.

### SAFE 205 - First Aid and Safety

Emphasizes prevention, protection from further harm and correct response to common emergencies resulting from trauma and/or illness confronting the citizen. Provides opportunity to earn certification in American Red Cross First Aid and American Red Cross CPR or American Health Association CPR.

Credits: 3  
Term(s) Typically Offered: Offered as Needed

### SAFE 218 - Legislative Compliance-General Industry

Examines workplace hazards as they relate to the Occupational Safety and Health Act and promulgated standards (Labor).

Credits: 3  
Term(s) Typically Offered: Offered Fall & Spring Terms  
Students with a semester level of Freshman 1 may **not** enroll.  
Enrollment is limited to students with a major in Safety Management.



**SAFE 228 - Motor Transportation Fleet Safety**

Focuses on the essential elements of a comprehensive motor transportation fleet safety program as they relate to protecting and conserving enterprise resources.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment is limited to students with a program in Safety Management.

**SAFE 248 - Hazardous Materials & Waste Management**

Examines the recognition, evaluation, control, and legislative compliance of hazardous materials and waste through effective safety management.

Prerequisites: CHEM 104<sup>D</sup> or CHEM 107<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment is limited to students with a program in Safety Management.

**SAFE 258 - Construction Safety**

Safety requirements and responsibilities for the construction industry.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment is limited to students with a program in Safety Management.

**SAFE 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 318 - Principles of Industrial Hygiene**

Concentrates upon the recognition, evaluation and control of employee-related workplace health hazards. Course includes an instrumentation component.

Prerequisites: CHEM 104 (may be taken concurrently)<sup>D</sup> or CHEM 107<sup>\*D</sup> (may be taken concurrently).

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 319 - Principles of Industrial Hygiene II**

Concentrates upon the recognition, evaluation and control of employee-related workplace hazards. Course includes an instrumentation component. Courses is a continuation of SAFE 318.

Prerequisite: SAFE 318<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 328 - Comprehensive Emergency Management and Fire Services**

Examines comprehensive emergency management and fire services as they relate to preparing, preparing, protecting, and preserving resources.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 338 - Ergonomics and Human Factors**

Examines workplace design adversities as well as their remediation by the safety function.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 368 - Injury and Damage Incidents Evaluation**

Focuses on the investigation, analysis, and evaluation of injury and property damage incidents. Includes Workers' Compensation and insurance variations.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 378 - Energy Exploration and Generation**

This course examines the safety management of energy exploration and energy generation safety.

Prerequisites: SAFE 118<sup>D</sup> and SAFE 218<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Summer & Winter Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Safety Management.

**SAFE 385 - Safety Measurement, Evaluation, and Research**

This course introduces safety management students to applied safety research utilizing analysis of evaluative data and statistical procedures applicable to the safety field. The course includes discussions on databases, sampling techniques, and statistical and survey tools. This course will introduce students to data interpretation and how to prepare applied safety research documents.

Prerequisites: SAFE 118<sup>C</sup> and SAFE 218<sup>C</sup> and SAFE 258<sup>C</sup> and SAFE 318<sup>\*C</sup> and SAFE 319<sup>\*C</sup> and STAT 152 (may be taken concurrently)<sup>C</sup> (may be taken concurrently).

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1 or Senior 2.

Enrollment limited to students with department of Safety Management.

**SAFE 388 - Insurance Risk and Loss Control Management**

Examines Risk as it applies to Occupational Safety and Health in an evolving world with a focus on risk assessment and treatment through Insurance and Loss Control Management.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1, Senior 2 or Sophomore 2.

Enrollment limited to students with department of Safety Management.

**SAFE 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 408 - Contemporary Safety Topics and Issues**

Examines emerging issues and topics in the field of safety. Must be taken the semester prior to internship.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 418 - Security in the Workplace**

Examines security in relation to protecting assets and resources within an enterprise.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SAFE 448 - Management and Integration of Safety**

Involves the development, integration, evaluation, management, and cost containment strategies of the safety function within an enterprise.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 450 - Internship**

Provides opportunity to apply theory and develop competencies through a work-related experience in an appropriate cooperating enterprise. Summers only.

Credits: 3-12

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2, Junior 1, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 478 - Environmental Permitting and Sustainability**

This course examines the role of Safety Management in assessment of environmental regulations and permitting and application of sustainability practices.

Prerequisites: SAFE 118<sup>D</sup> and SAFE 218<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Summer & Winter Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Safety Management.

**SAFE 488 - Safety Training and Development**

Examines workplace safety training and development as they relate to employer work task performance at all levels of an organization.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Safety Management.

**SAFE 490 - Independent Study**

Students study under the supervision of a professor on a specific and significant topic. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

## Safety Management, Bachelor of Science (BS)

The Department of Safety Management offers a hands-on, practical, and applied Bachelor of Science Degree in Safety Management. The B.S. in Safety Management is designed to assure development of competencies which enable innovative approaches in the establishment and direction of comprehensive safety programs in educational, governmental, private business and industrial enterprises. Safety Management involves protecting and preserving people, property, productivity and the environment. The curriculum fosters an education that enables students to become responsible, knowledgeable and accountable safety professionals. The Bachelor of Science degree in Safety Management at Slippery Rock University meets the Board of Certified Safety Professionals (BCSP) requirements as a Qualified Academic Program (QAP). The Bachelor of Science degree in Safety Management is an Institute of Hazardous Materials Management (IHMM) Board approved Degree Program.

The Department of Safety Management also operates a National Resource Center-WVU OSHA Training Institute Education Center Host Site. The Department adheres to the OSHA requirements that an instructor be physically in the classroom with a maximum number of 40 students. Students who successfully complete SAFE 218 (General Industry) and SAFE 258 (Construction) are eligible to receive OSHA cards. The Cards are an added value to the courses. However, a student must meet all the OSHA requirements to receive the Cards. Cards are issued at the discretion of the Instructor and enrollment in the courses does not entitle the student to the Cards. The Department is also able to offer additional OSHA courses.

For Safety Management laboratory courses, the Department of Safety Management attempts to follow the recommendation of both the National Science Teachers Association (NSTA) and Laboratory Safety Institute (LSI) which is to have the lesser of 24 students per lab, and the design capacity of the room, or 55 sq. ft. per student for lecture/lab combo rooms and 45 sq. ft. per student for only lab rooms.

**GPA Policy**

- Once admitted to the Safety Management major, all students must maintain an overall GPA of 2.0 and a Major GPA of 2.0 in order to graduate with a Bachelor of Science Degree in Safety Management. It is solely the students' responsibility to monitor and meet this requirement.

## Professional Certifications Board of Certified Safety Professionals

Upon graduation (must apply within one year), Slippery Rock University Safety Majors are eligible for the Graduate Safety Practitioner (GSP) designation which waives the Associate Safety Professionals (ASP) examination and provides a pathway to the professional certification of a Certified Safety Professional (CSP). Upon four years of qualifying experience, Safety Management graduates are eligible to sit for the CSP examination. Accredited by the American Standards Institute and the National Council on Competency Assessment.

For additional information, visit: [www.bcsp.org](http://www.bcsp.org) (<https://www.bcsp.org>)

## The Institute of Hazardous Materials Management (IHMM)

The Bachelor of Science Degree in Safety Management is an IHMM approved Degree Program. Upon graduation, Slippery Rock University Safety Majors are eligible for the Associate Safety and Health Manager Certification (ASHM) designation since the examination is waived. The ASHM provides a pathway to the professional certification of a Certified Safety and Health Manager (CSHM). Upon two years of qualifying experience, Safety Management graduates are eligible to sit for the CSHM examination. Accredited by the Council of Engineering and Scientific Specialty Boards.

For additional information about the ASHM, visit: [ihmm.org/ashm/](http://ihmm.org/ashm/) (<https://ihmm.org/ashm/>)

To set up an account, click here ([https://online.ihmm.org/ihmmssa/f/?p=STDSSA:101:::P101\\_VC,P101\\_CONTEXT,CUST\\_CONTEXT,G\\_SUCCESS\\_URL::,,ssa](https://online.ihmm.org/ihmmssa/f/?p=STDSSA:101:::P101_VC,P101_CONTEXT,CUST_CONTEXT,G_SUCCESS_URL::,,ssa))

## Internship Program

The internship offers students the opportunity to obtain firsthand experience in the work place. Students are provided the opportunity to apply concepts and techniques learned in the classroom to the

workplace environment. The internship program is administered in cooperation with a variety of organizations, including government, industry, insurance, health care and other related enterprises. The 12-week, 12-credit internship is offered only during the summer term, with the majority of interns receiving compensation.

Contact the Department of Safety Management for the most current requirements.

## Safety Management Department Attendance Policy

Attend and participate in class. There is no distinction between “excused and unexcused”. When you are absent from class, **you are absent**. It is your responsibility to find out what was covered that day. As a Safety major, in order to prepare you for a career as a professional Safety practitioner, you are expected to attend class regularly and promptly. Attendance Policy requirements are noted on course instruction syllabus.

## Electronic Device Use In Class

Electronic devices such as cell phones, pagers, video games, etc. are not permitted on and must be put away during class. Student must obtain instructor’s permission to use a laptop or any word processing device in the classroom. Also, no tape recording of class unless permission is given by the instructor. Electronic device use requirements are noted on course instructor syllabus.

## Program Learning Outcomes

- **Professional Interaction:** To interact and communicate with managerial, supervisory, labor and external public using a combination of communication, training, and technological skills for a clear exchange of ideas and information. These skills include: integrating different media in a variety of professional settings, using computers and other informational technology, using data, listening and comprehending the viewpoints of others, and effectively presenting information in oral and written formats.
- **Professional Decision Making:** To use critical and creative thinking in preserving enterprise resources, solving problems, making decisions and gaining new insights in professional decision-making. These skills include: clarifying and justifying assumptions, reasoning with considerations of implications and consequences, inferring and drawing conclusions, and evaluating the historical, financial, legal and political decisions that impact on the safety function.
- **Professional Ethics and Responsibility:** To value the need for lifelong personal and professional development and mandate for ethical, responsible, and accountable professional practice or performance which includes a sensitivity to and affirmation of moral values in an evolving technologic and litigious society.
- **Professional Competence and Application:** To synthesize the body of knowledge of safety and environmental management as a basis for the performance of the skills and abilities required for an entry-level professional. This ability includes applying research findings to assure currency in the practice and the advancement of theoretical knowledge and practice within the profession.

## Related Links

Safety Management, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/safety-management/>)

Safety Management Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/departments/safety-management/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Overall GPA: 2.00 or higher

Major GPA: 2.00 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42-43
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	60
	Electives	18

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
	Select one of the following:	3-4
STAT 152	Elementary Statistics I	
MATH 125	Precalculus	
MATH 225	Calculus I	
	Select one of the following:	3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
	Subtotal	15-16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
	Select 3 Credits (p. 29)	3
<i>Humanities Inquiry</i>		
	Select 3 Credits (p. 29)	3
<i>Social Science Inquiry</i>		
	Select 3 Credits (p. 29)	3
<i>Natural Sciences Inquiry</i>		
CHEM 106	Introductory Chemistry II	3
or CHEM 108	General Chemistry II	
<i>Physical Sciences Inquiry</i>		
CHEM 104	Introduction Chemistry I	3
or CHEM 107	General Chemistry I	
	Subtotal	15
<b>Thematic Thread</b>		

Select 12 Credits (p. 29) <sup>2</sup>	12
<b>Total Hours</b>	<b>42-43</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Professional Courses</b>		
SAFE 118	Introduction to Safety <sup>1</sup>	3
SAFE 218	Legislative Compliance-General Industry <sup>1</sup>	3
SAFE 248	Hazardous Materials & Waste Management <sup>1</sup>	3
SAFE 258	Construction Safety <sup>1</sup>	3
SAFE 318	Principles of Industrial Hygiene <sup>1</sup>	3
SAFE 319	Principles of Industrial Hygiene II <sup>1</sup>	3
SAFE 328	Comprehensive Emergency Management and Fire Services <sup>1</sup>	3

SAFE 338	Ergonomics and Human Factors <sup>1</sup>	3
SAFE 368	Injury and Damage Incidents Evaluation <sup>1</sup>	3
SAFE 408	Contemporary Safety Topics and Issues <sup>1</sup>	3
SAFE 448	Management and Integration of Safety <sup>1</sup>	3
SAFE 450	Internship <sup>1,3</sup>	12
SAFE 488	Safety Training and Development <sup>1</sup>	3
Subtotal		48

### Safety Electives

Select two of the following:		6
SAFE 228	Motor Transportation Fleet Safety <sup>1</sup>	
SAFE 378	Energy Exploration and Generation <sup>1</sup>	
SAFE 418	Security in the Workplace <sup>1</sup>	
SAFE 478	Environmental Permitting and Sustainability <sup>1</sup>	
Subtotal		6

### Required Support Courses

MGMT 351	Organizational Behavior <sup>2</sup>	3
MGMT 354	Human Resources Management <sup>2</sup>	3
Subtotal		6
<b>Total Hours</b>		<b>60</b>

<sup>1</sup> Course counts for 50% of Major and Major GPA

<sup>2</sup> Course counts for 50% of Major requirements but not for Major GPA

<sup>3</sup> Student may select from a combination of 3 credits, 6 credits, 9 credits, or 12 credits to fulfill the 12 credit hour internship requirement.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Additional Required Courses

Code	Title	Hours
CHEM 104	Introduction Chemistry I	3
or CHEM 107	General Chemistry I	
CHEM 106	Introductory Chemistry II	3
or CHEM 108	General Chemistry II	
Select one of the following:		3-4
STAT 152	Elementary Statistics I	
MATH 125	Precalculus	
MATH 225	Calculus I	
<b>Total Hours</b>		<b>9-10</b>

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

SAFETY MANAGEMENT - BS (2176)



This program is effective as of Fall 2019.  
 Revised 06.29.2022  
 UCC 03.16.2021

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CHEM 104	Introduction Chemistry I	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SAFE 118	Introduction to Safety	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
CHEM 106	Introductory Chemistry II	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Humanities Inquiry (p. 29)		3
Social Science Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
SAFE 218	Legislative Compliance-General Industry	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
SAFE 228	Motor Transportation Fleet Safety	3
Thematic Thread Requirement (p. 29)		3
Free Elective		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
MGMT 351	Organizational Behavior	3
SAFE 248	Hazardous Materials & Waste Management	3
SAFE 258	Construction Safety	3
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
MGMT 354	Human Resources Management	3
SAFE 318	Principles of Industrial Hygiene	3
SAFE 328	Comprehensive Emergency Management and Fire Services	3
SAFE 338	Ergonomics and Human Factors	3
SAFE 368	Injury and Damage Incidents Evaluation	3
SAFE 488	Safety Training and Development	3
<b>Hours</b>		<b>18</b>

### Spring

SAFE 319	Principles of Industrial Hygiene II	3
SAFE 408	Contemporary Safety Topics and Issues	3
SAFE 418	Security in the Workplace	3
SAFE 448	Management and Integration of Safety	3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>

### Summer

SAFE 450	Internship	12
<b>Hours</b>		<b>12</b>

### Fourth Year

#### Fall

SAFE 378	Energy Exploration and Generation	3
SAFE 385	Safety Measurement, Evaluation, and Research	3
SAFE 388	Insurance Risk and Loss Control Management	3
SAFE 478	Environmental Permitting and Sustainability	3
Free Elective		3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

Major Code: 2176

Revised: 04.21.22

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

## Sport Management, Hospitality and Tourism

Chair	Secretary	Location	Department Phone
Dr. Brian Crow	Diane Robbins	101 Eisenberg Classroom Building	724-738-2060
Department Web Site URL ( <a href="http://www.sru.edu/academics/colleges-and-departments/cob/departments/sport-management/">http://www.sru.edu/academics/colleges-and-departments/cob/departments/sport-management/</a> )			
Sport Management Fact Sheet ( <a href="https://www.sru.edu/documents/programs/factsheets/undergraduate/sportmgmt-fs.pdf">https://www.sru.edu/documents/programs/factsheets/undergraduate/sportmgmt-fs.pdf</a> )			
Hospitality and Tourism Management Fact Sheet ( <a href="https://www.sru.edu/documents/programs/factsheets/undergraduate/hemt-fs.pdf">https://www.sru.edu/documents/programs/factsheets/undergraduate/hemt-fs.pdf</a> )			

The curriculum continues to be reviewed and adapted to meet changes in the sport industry. Evaluations from student interns and agency supervisors create the basis of the university's considerations, along with program standards developed by COSMA. The Sport Management Department is accredited by COSMA (The Commission on Sport Management Accreditation) and is one of only 50 programs in the US to be accredited. In 2010, the Department of Sport Management was the first program in the US to be accredited by the Commission on Sport Management Accreditation (COSMA), and in 2017 was the first program to be re-accredited."

## Faculty

### **Robertha Abney**

Associate Professor  
Sport Mgt, Hospitality & Tour  
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### **Maryjo Ross**

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Ph.D., Texas Tech University  
M.S., Florida International University  
B.S., Chinese Culture University

## Programs

### **Majors**

- Resort, Recreation and Hospitality Management, Bachelor of Science (BS) (p. 115)
- Sport Management, Bachelor of Science (BS) (p. 117)

### **Minors**

- Esports, Minor (p. 113)
- Sport Management, Minor (p. 120)

### **Certificates**

- Hospitality Management, Certificate (p. 114)

## Courses

### **HEMT Courses**

#### **HEMT 112 - Introduction to HEMT**

The purpose of this course is to assist individuals with matching their aspirations with the opportunities within the hospitality and tourism profession. Primary areas related to tourism, recreation and event and hospitality management will be discussed providing a roadmap for students to chart their careers in the profession.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

#### **HEMT 114 - Sustainability in Food and Hospitality**

An exploration of the economic, environmental and social sustainability challenges and advancements in the hospitality and food industry. A comprehensive investigation of today's U.S. food system with particular focus on the food system's interrelationships with public health, the environment, equity, and society.

Credits: 3

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

#### **HEMT 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

#### **HEMT 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

#### **HEMT 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**HEMT 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HEMT 210 - Contemporary Travel and Tourism**

This course provides students with a diverse and contemporary knowledge of the tourism industry, ecotourism, tourist behavior, tourism management, and issues in medical tourism, crisis management, sustainable travel and environmental friendly practice within the overall global tourism sector. Students will have opportunities to investigate real life cases and current events, and to explore the various elements of the travel and tourism industry and how they interrelate. This will enable students to develop an overall knowledge in the field and appreciation of the global travel and tourism experience.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

**HEMT 215 - Public Relations for Hospitality, Event Management & Tourism**

The theory, principles and practices of public relations of value to hospitality and tourism personnel including oral, written and graphic presentations useful in public relations and interpretive efforts.

Prerequisite: HEMT 112<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**HEMT 222 - Programming and Leadership for HEMT**

This course is designed to provide a sound basis of learning and practical methods in the realm of recreation programming and leadership. It includes practical approaches to program design, sequencing program experiences, processing experiences, assessment and evaluation and examines the needs of leaders as well as participants in terms of communication skills and preferred learning styles. Participant behaviors and the important traits of a positive leader will also be examined.

Prerequisite: HEMT 112<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**HEMT 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HEMT 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**HEMT 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HEMT 311 - Principles of Commercial Recreation/Tourism**

A study of the various forms of commercial recreation, business and facilities providing recreational opportunities.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HEMT 312 - Commercial Recreational Feasibility Studies**

This course is a study of financial, marketing, and operations management concepts that go into a feasibility study of a commercial recreation business.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HEMT 314 - Sustainable Planning for Tourism**

This course is designed to develop an understanding of how sustainable planning can reduce the negative impacts and maximize the benefits of the tourism industry. Students will research and evaluate the social, environmental and economic impacts of a variety of tourist destinations. Analyses of the sites will be followed by formulating proposals to address key issues.

Prerequisite: HEMT 210<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HEMT 316 - Management of Hospitality & Tourism Facilities**

A study of the design, operation and maintenance of selected hospitality, event management and tourism facilities.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HEMT 318 - Administration for Hospitality, Event Management & Tourism**

The organization and administration of hospitality, event management and tourism services, including organizational management, personnel practices and labor relations, financial and business procedures and legal aspects.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HEMT 320 - Hospitality and Tourism Marketing**

Course will examine service marketing concepts and practices as they relate to all areas of hospitality, tourism, and event management, and apply those principles to formulating marketing strategy.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students in a Bachelor of Science degree.

**HEMT 322 - Food and Beverage Operations**

Food and Beverage Operations is a survey of the food service industry to include: History and global economic impact, Menu engineering, Food sourcing with sustainable emphasis, Food Safety, Food Handling, Beverage Management, and exploration of commercial applications.

Prerequisite: HEMT 112<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

**HEMT 324 - Legal Issues in Hospitality and Tourism Management**

Course will examine legal issues affecting the contemporary Hospitality Industry, with an emphasis on a preventative approach to management. Extensive use of case studies will provide students with an awareness and understanding of the legal considerations necessary for sound policy and decision making.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2 or Sophomore 2.

**HEMT 326 - Introduction to Meetings and Event Management**

An introductory course for Event Management focusing on meetings, conferences, convention and trade shows with an emphasis on industry standards, language, and professional associations.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HEMT 351 - Practicum in HEMT**

Observation and participation in hospitality, event management and tourism activities. Cross listed as HEMT352.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HEMT 352 - Practicum in HEMT**

Observation and participation in hospitality, event management and tourism activities. Cross listed as HEMT351.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HEMT 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HEMT 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HEMT 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HEMT 415 - Challenges and Trends in Hospitality, Event Management & Tourism**

An integrative course for detailed study of current issues in hospitality, event management and tourism with emphasis on unique and imaginative solutions to the challenges facing the hospitality and tourism profession. Must be a senior to enroll.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**HEMT 416 - Resort Recreation Programming**

This course examines the planning, organization, pricing, and evaluation of recreation programs, activities, and special events at various four season resorts, municipal recreation departments and residential camps and camping facilities. This course will also analyze the planning, developing, marketing, administration, and implementation of group recreation and special events.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HEMT 417 - Hotel/Lodging & Hospitality Management**

This course is a study of the management and operation of a variety of departments/divisions of a hotel/resort.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HEMT 420 - Event Production and Coordination**

This course will explore the many aspects of event management, as well as identify and develop the skills necessary to design and develop a special event. Emphasis on the understanding of the genre, developmental steps in processing, and practical applications of execution in special event management. A HIP course, If feasible students will coordinate a live community event.

Prerequisite: HEMT 326<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HEMT 450 - Internship in HEMT**

A supervised off-campus work experience in an appropriate aspect of hospitality, event management, resort or municipal recreation or tourism work. Open only to HEMT majors with advanced standing.

Credits: 1-12

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Sport Mgt, Hospitality & Tour.

**HEMT 490 - Independent Study**

A special study opportunity for students to investigate in-depth, approved topics in hospitality, event management and tourism. Topic and credit established by student and supervising instructor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HEMT 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HEMT 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## SPMT Courses

**SPMT 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**SPMT 150 - Sport Management Practicum**

The SPMT practicum is designed to provide the student with a realistic experience at at level and in a setting similar to that in which he/she wishes to obtain employment. The practicum experience is a 50- hour learning opportunity in which the student assists in a particular aspect of an organization in the sport industry. SPMT 150 may be repeated to a maximum of 4 credits in 4 different experiences, and each should be with a different organization.

Prerequisite: SPMT 194<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Every Term

Enrollment limited to students with department of Sport Mgt, Hospitality & Tour.

**SPMT 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SPMT 194 - Introduction to Sport Management**

This course is an introduction to the field of sport management. Career options and managerial content will be reviewed. Foundation studies of sport, including history, philosophy, and professional skills, will be discussed. Must achieve at least a C grade before progressing to other SPMT courses.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment is limited to students with a program in Sport Management or Sport Management.

**SPMT 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed



**SPMT 196 - Global Sport Management**

As the economy has shifted from a domestic to a globally competitive marketplace, the demand has grown for sport managers who can function effectively in the international environment. This course develops a framework for understanding the international aspects of sport management. It provides future sport managers with a broad view of the factors underlying international sport competition, sport economics, sport marketing, sport management, and sport governance. Emphasis is on environmental dynamics, cultural and economic constraints, multinational sport business organizations, unique international sport events and international sport operations, strategy and policy.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**SPMT 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SPMT 269 - American Sport in the 21st Century**

This course is designed to give the students an understanding of the internal and external factors that shape sport in American culture. This course will analyze how sport mirrors societal changes and how sociological phenomena affect participation and behavior.

Credits: 3

Term(s) Typically Offered: Offered Fall & Summer Terms

Enrollment limited to students with department of Sport Mgt, Hospitality & Tour.

**SPMT 286 - Sport Communication and Technology**

This course is intended to provide students with a comprehensive understanding of communication and communication techniques that managers use to achieve excellence in sport organizations. Focus will be placed on public relations, as well as techniques for improving the communication skills of each student in an organized sport setting. Students will receive in-depth exposure to, (a) theories underlying the use of public relations in sport, (b) new technologies in sport communication, (c) desktop publishing in sport organizations, (d) sport organizational communication techniques, and (e) sport media relations.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Sport Mgt, Hospitality & Tour.

**SPMT 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SPMT 294 - Sport Management and Ethics**

This course is designed to integrate the concepts learned from the foundation courses in management as they apply to management areas of sport and sport agencies. The ethical strategies of sport management will be emphasized in all management decisions.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with department of Sport Mgt, Hospitality & Tour.

**SPMT 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**SPMT 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SPMT 301 - The Fan Experience**

This course will demonstrate how the fan experience in a sport venue is impacted by marketing, promotions, the venue staff, venue design, technology, and other factors. Students will understand the customer journey and be able to identify and eliminate friction points in the fan experience.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPMT 315 - Diversity Issues in Sport Management**

This course is designed to explore the persistent causes of pervasive racism and sexism in sport as it relates to the sport management field.

Prerequisites: SPMT 194<sup>C</sup> and SPMT 196<sup>D</sup> and SPMT 269<sup>D</sup>

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1 or Freshman 2 may **not** enroll.

Enrollment limited to students with department of Sport Mgt, Hospitality & Tour.

**SPMT 369 - Sport Budgeting and Finance**

The focus of this course is on budgeting and financial principles in the sport industry. Major components of the course include analyzing budgets from youth, community, recreational, interscholastic, intercollegiate, professional, and international sport organizations, as well as studying the financial composition and impact of the sport industry. Students will also learn to construct various types of budgets used by sport organizations.

Prerequisites: SPMT 194<sup>D</sup> and SPMT 196<sup>D</sup> and SPMT 269<sup>D</sup> and SPMT 286<sup>D</sup> and SPMT 294<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPMT 386 - Leadership in Athletic Administration and Sport Management**

The major emphasis is on the preparation of athletic administrators and sport managers within collegiate university, high school, community and youth sport organizations. Information presented in this course will examine leadership theoretical concepts to help prepare students pursuing a career in athletics management/administration. Through critical thinking component and practical application exercises, the student will apply leadership theories, principles and concepts. Ultimately, the student will develop essential leadership competencies and skills for today's athletic administrators.

Prerequisites: SPMT 150<sup>D</sup> and SPMT 194<sup>C</sup> and SPMT 294<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with department of Sport Mgt, Hospitality & Tour.

**SPMT 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPMT 394 - Sport Marketing**

Sport Marketing is designed to apply marketing principles to the area of sport, sport events and sport products. Marketing strategies including sales, promotions and advertising of sport will be emphasized.

Prerequisites: SPMT 150<sup>D</sup> and SPMT 194<sup>C</sup> and SPMT 196<sup>D</sup> and SPMT 286<sup>D</sup> and SPMT 294<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Winter Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Sport Mgt, Hospitality & Tour.

**SPMT 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPMT 396 - Selling in the Sport Industry**

This course examines the skills required for a successful career in sport sales, including personal selling, social media, and electronic sales. Students will learn sales strategies for single game tickets, season tickets, group tickets, and premium tickets and will be involved in selling tickets for a sport organization.

Prerequisites: SPMT 150<sup>D</sup> and SPMT 194<sup>C</sup> and SPMT 196<sup>D</sup> and SPMT 286<sup>D</sup> and SPMT 294<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring & Winter Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students in the BS 2150 program.

Enrollment limited to students with department of Sport Mgt, Hospitality & Tour.

**SPMT 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPMT 406 - Sport Fundraising and Event Management**

The course content will include multiple aspects of creating, funding, and executing a variety of sports events. Topics include event planning, staffing, managing, and evaluating. Students will plan, develop, and execute their own event. In addition, the various aspects of athletic development and fundraising, particularly at the intercollegiate level, will be explored.

Prerequisites: SPMT 150<sup>D</sup> and SPMT 194<sup>C</sup> and SPMT 196<sup>D</sup> and SPMT 286<sup>D</sup> and SPMT 294<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Sport Mgt, Hospitality & Tour.

**SPMT 450 - Sport Management Internship**

This course provides students with the opportunity to apply sport and fitness career-oriented skills in public, commercial, and private agencies. The internship is designed to be an in-depth experience. This is a Theory and Technique Course. All Sport Management coursework must be completed before enrolling in SPMT 450.

Prerequisites: SPMT 150<sup>D</sup> and SPMT 194<sup>C</sup> and SPMT 196<sup>D</sup> and SPMT 269<sup>D</sup> and SPMT 286<sup>D</sup> and SPMT 294<sup>D</sup> and SPMT 315<sup>D</sup> and SPMT 394<sup>D</sup> and SPMT 396<sup>D</sup> and SPMT 406<sup>D</sup> and SPMT 486<sup>D</sup> and SPMT 494<sup>C</sup> and SPMT 499<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 1-12

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with department of Sport Mgt, Hospitality & Tour.

**SPMT 486 - Sport Law and Facilities**

The course will demonstrate how various aspects of law and the legal system apply to the sport industry, with a particular emphasis on risk management, and sport facility operations. In addition, the course will provide a fundamental overview of the US court system.

Prerequisites: SPMT 150<sup>D</sup> and SPMT 194<sup>C</sup> and SPMT 196<sup>D</sup> and SPMT 286<sup>D</sup> and SPMT 294<sup>D</sup> and SPMT 269<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring & Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Sport Mgt, Hospitality & Tour.

**SPMT 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPMT 494 - Sport Management Senior Seminar**

This course is designed for the senior Sport Management student, this course will examine topics dealing with sport finance management, sport law, sport facility management, and time and stress management. Field trips to sport agencies will be required. This course must be taken in the academic semester prior to SPMT 450 (Internship).

Prerequisites: SPMT 150<sup>D</sup> and SPMT 194<sup>C</sup> and SPMT 196<sup>D</sup> and SPMT 269<sup>D</sup> and SPMT 286<sup>D</sup> and SPMT 294<sup>D</sup> and SPMT 315<sup>D</sup> and SPMT 394<sup>D</sup> and SPMT 396<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with department of Sport Mgt, Hospitality & Tour.

**SPMT 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPMT 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPMT 499 - Sport Management Research Methods**

A study of research methodology and terminology in Sport Management entailing a critical analysis of available research. Specific attention is directed to formal written communication and oral presentation skills.

Prerequisites: SPMT 150<sup>D</sup> and SPMT 194<sup>C</sup> and SPMT 196<sup>D</sup> and SPMT 269<sup>D</sup> and SPMT 286<sup>D</sup> and SPMT 294<sup>D</sup> and SPMT 394<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Sport Mgt, Hospitality & Tour.

## Esports, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## RELATED LINKS

Esports, Minor Program Page ([https://www.sru.edu/academics/majors-and-minors/esports-\(minor\)/](https://www.sru.edu/academics/majors-and-minors/esports-(minor)/))

Hospitality, Event Management and Tourism Page (<https://www.sru.edu/academics/colleges-and-departments/cob/departments/hospitality-and-tourism-management/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Major GPA: 2.0 or higher

### MINOR REQUIREMENTS

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Core Courses</b>		
EXSC 204	Introduction to Esports	3
EXSC 304	Current Issues in Esports Health and Society	3
HEMT 326	Introduction to Meetings and Event Management	3
Subtotal		
<b>Electives</b>		
Select three from at least 2 different departments:		9
HEMT 215	Public Relations for Hospitality, Event Management & Tourism	
HEMT 420	Event Production and Coordination	
COMM 205	Audio Production	
COMM 254	Video Production	
COMM 354	TV Studio Production	
COMM 365	Sports and Esports Production	
SPMT 301	The Fan Experience	
SPMT 394	Sport Marketing	
<b>Total Hours</b>		<b>18</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN ESPORTS - (71E)

This program is effective as of Summer 2022

Revised 06.30.2022

UCC 04.05.2022

## Hospitality Management, Certificate

To access Certificate Requirements, please view the Curriculum Guide tab.

### Related Links

Hospitality Management, Certificate Program Page (<https://www.sru.edu/academics/certificates/hospitality-management-certificate/>)

Hospitality and Tourism Management Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/departments/hospitality-and-tourism-management/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

### Curriculum Guide

#### GPA Requirement

Overall GPA: 2.0 or higher

#### Certificate Requirements

- Students must complete at least 6 credit hours in their Concentration from SRU.
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A Certificate shall be no fewer than 12 credits.

Code	Title	Hours
<b>Required Courses</b>		
HEMT 112	Introduction to HEMT	3
HEMT 114	Sustainability in Food and Hospitality	3
Subtotal		6
<b>Electives</b>		
Select six credits from the following:		6
HEMT 322	Food and Beverage Operations	
HEMT 326	Introduction to Meetings and Event Management	
HEMT 416	Resort Recreation Programming	
HEMT 417	Hotel/Lodging & Hospitality Management	
Subtotal		12

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Certificate in Hospitality Management (237C)

Effective Fall 2021

Revised 07.26.2

UCC 03.02.21

## Resort, Recreation and Hospitality Management, Bachelor of Science (BS)

### Program Learning Outcomes

- **Communication Skills:** RRHM graduates demonstrate quality written and verbal communication skills as applied to hospitality/tourism and guest relations.
- **Business Skills:** RRHM graduates demonstrate competency in business skills needed to manage related departments within the hospitality/tourism industry.
- **Competency in Historical Perspectives:** RRHM graduates demonstrate competency in the historical perspective of the hospitality and tourism industry to ongoing social, cultural, and political policies or constraints.
- **Competency in Administration, Programming, and Event Planning:** RRHM graduates demonstrate competency in administration, programming, event and meeting planning skills related to the hospitality and tourism industry.
- **Demonstrate Professional Values and Behavior:** RRHM graduates demonstrate professional values and behavior within the field of hospitality and tourism.
- **Competency in Sustainable Hospitality and Tourism:** RRHM graduates demonstrate competency in sustainable hospitality and tourism practices.
- **Competency in Planning and Evaluation:** RRHM graduates demonstrate competency in planning and evaluating hospitality and tourism facilities.

### Related Links

Resort, Recreation and Hospitality Management, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/resort-recreation-and-hospitality-management/>)

Hospitality, Event Management and Tourism Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/departments/hospitality-event-management-and-tourism/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

### Curriculum Guide

#### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

#### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3

Computer Competency	0-3
Major Requirements	60
Electives	18

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>



## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Resort, Recreation &amp; Hospitality Management Core</b>		
HEMT 112	Introduction to HEMT <sup>1</sup>	3
HEMT 114	Sustainability in Food and Hospitality <sup>1</sup>	3
HEMT 210	Contemporary Travel and Tourism <sup>1</sup>	3
HEMT 215	Public Relations for Hospitality, Event Management & Tourism <sup>1</sup>	3
HEMT 222	Programming and Leadership for HEMT <sup>1</sup>	3
HEMT 316	Management of Hospitality & Tourism Facilities <sup>1</sup>	3
HEMT 322	Food and Beverage Operations <sup>1</sup>	3
HEMT 326	Introduction to Meetings and Event Management	3
HEMT 351	Practicum in HEMT <sup>1</sup>	3
HEMT 415	Challenges and Trends in Hospitality, Event Management & Tourism <sup>1</sup>	3
Subtotal		30
<b>Required Internship</b>		
HEMT 450	Internship in HEMT <sup>1</sup>	12
Subtotal		12
<b>Resort, Recreation &amp; Hospitality Management Track</b>		
HEMT 311	Principles of Commercial Recreation/ Tourism <sup>1</sup>	3
HEMT 312	Commercial Recreational Feasibility Studies <sup>1</sup>	3
HEMT 320	Hospitality and Tourism Marketing	3
HEMT 416	Resort Recreation Programming <sup>1</sup>	3
HEMT 417	Hotel/Lodging & Hospitality Management <sup>1</sup>	3
HEMT 420	Event Production and Coordination	3
Subtotal		18
<b>Total Hours</b>		<b>60</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. 120-hour Practicum and 480-hour Internship experience (required)
2. Career education and development through interaction with industry professionals
3. Networking skills including opportunity to attend national industry conference
4. Membership opportunities in career-related professional organizations
5. Volunteering opportunities with community and campus organizations
6. High-Impact Practice (HIP) designated classes

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Bachelor of Science in Resort, Recreation & Hospitality Management (2373)

This program is effective as of Summer 2020.

Revised: 10.28.2021

UCC 03.02.21

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
HEMT 112	Introduction to HEMT	3
ENGL 102	Critical Writing	3
ESAP 101	FIRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery	3
Creative & Aesthetic Inquiry (p. 29)		3
Rock Studies 2 Course (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
HEMT 114	Sustainability in Food and Hospitality	3
ENGL 104	Critical Reading <sup>1</sup>	3
Rock Studies 2 Course (p. 29)		3
Rock Studies 2 Course (p. 29)		3

Rock Studies 2 Course (p. 29)	3
<b>Hours</b>	<b>15</b>
<b>Second Year</b>	
<b>Fall</b>	
HEMT 222 Programming and Leadership for HEMT	3
Civil Discourse - Select one of the following:	3
COMM 200 Civil Discourse: Theory & Practice	
PHIL 110 Ethics and Civil Discourse	
POLS 235 Civil Discourse and Democracy	
Rock Studies 2 Course (p. 29)	3
Rock Studies 2 Course (p. 29)	3
Rock Studies 2 Course (p. 29)	3
Declare a Thematic Thread <sup>2</sup>	
<b>Hours</b>	<b>15</b>
<b>Spring</b>	
HEMT 210 Contemporary Travel and Tourism	3
HEMT 215 Public Relations for Hospitality, Event Management & Tourism <sup>1</sup>	3
Rock Studies 2 Course (p. 29)	3
Rock Studies 2 Course (p. 29)	3
Rock Studies 2 Course (p. 29)	3
<b>Hours</b>	<b>15</b>
<b>Third Year</b>	
<b>Fall</b>	
HEMT 311 Principles of Commercial Recreation/Tourism	3
HEMT 322 Food and Beverage Operations	3
HEMT 320 Hospitality and Tourism Marketing	3
Minor Course	3
Minor Course	0
<b>Hours</b>	<b>12</b>
<b>Spring</b>	
HEMT 312 Commercial Recreational Feasibility Studies	3
HEMT 316 Management of Hospitality & Tourism Facilities	3
HEMT 326 Introduction to Meetings and Event Management	3
Free Elective/Minor Course	3
Minor Course	0
<b>Hours</b>	<b>12</b>
<b>Summer</b>	
(Taken after Third Year Spring)	
HEMT 351 Practicum in HEMT	3
<b>Hours</b>	<b>3</b>
<b>Fourth Year</b>	
<b>Fall</b>	
HEMT 417 Hotel/Lodging & Hospitality Management	3
HEMT 420 Event Production and Coordination	3
Free Elective/Minor Course	3
Free Elective/Minor Course	3
Minor Course	0
<b>Hours</b>	<b>12</b>

**Spring**

HEMT 415	Challenges and Trends in Hospitality, Event Management & Tourism	3
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HEMT 416	Resort Recreation Programming	3
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Free Elective/Minor Course	3
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Minor Course	0
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Minor Course	0
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<b>Hours</b>	<b>9</b>
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**Summer**

(Taken after Fourth Year Spring)

HEMT 450	Internship in HEMT	12
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<b>Hours</b>	<b>12</b>
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<b>Total Hours**</b>	<b>121</b>
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<sup>1</sup> Course has a prerequisite. See undergraduate online catalog.<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 2373

Revised date: 05.03.2022

## Sport Management, Bachelor of Science (BS)

The sport management degree program at Slippery Rock University has received specialized accreditation through the Commission on Sport Management Accreditation (COSMA) located in Fort Collins, Colorado, USA. In 2010, the Department of Sport Management was the first program in the US to be accredited by the Commission on Sport Management Accreditation (COSMA), and in 2017 was the first program to be re-accredited.

## Program Learning Outcomes

The Sport Management faculty has established five program outcomes for the undergraduate program that are implemented on a daily basis inside and outside the classroom. These program outcomes are an extension of the mission statement and connect to the university's outcomes. In order to achieve our mission, these outcomes are assessed using a variety of direct and indirect performance indicators.

- **Communication:** Communicate effectively in speech and in writing, using appropriate information sources, presentation formats, and technologies.
- **Diversity, Ethical, Legal and Financial Practices:** Integrate diverse, ethical, legal and financial principles and understand their impact on decision making in sport managerial situations.
- **Technological and Global Interdependence:** Demonstrate proficiency in use of current technologies and exhibit understanding of the global sport industry.

- **Professional Proficiency and Development:** Apply knowledge and skills to meet professional competencies within sport industry.
- **Critical Thinking and Problem Solving:** Demonstrate ability to identify, analyze, synthesize and evaluate information and ideas through professional performance in simulated sport industry environments such as an internship, practicum or volunteer experience.

## Related Links

Sport Management, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/sport-management/>)

Sport Management Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/departments/sport-management/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	58
	Electives	20

\* All undergraduate degree programs require a minimum of 120 credits.  
Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		

SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.
- <sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

### Major Requirements

- 29 major credits must be taken at SRU or PASSHE
- 29 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Practical Application Courses</b>		
SPMT 150	Sport Management Practicum (Freshman) <sup>1</sup>	1
SPMT 150	Sport Management Practicum (Sophomore) <sup>1</sup>	1
SPMT 150	Sport Management Practicum (Junior) <sup>1</sup>	1
SPMT 150	Sport Management Practicum (Senior) <sup>1</sup>	1

Subtotal		4
<b>Sport Management</b>		
SPMT 194	Introduction to Sport Management (Freshman) <sup>1</sup>	3
SPMT 196	Global Sport Management (Freshman) <sup>1</sup>	3
SPMT 269	American Sport in the 21st Century (Sophomore) <sup>1</sup>	3
SPMT 286	Sport Communication and Technology (Sophomore) <sup>1</sup>	3
SPMT 294	Sport Management and Ethics (Sophomore) <sup>1</sup>	3
SPMT 315	Diversity Issues in Sport Management (Junior) <sup>1</sup>	3
SPMT 369	Sport Budgeting and Finance (Junior/Senior) <sup>1</sup>	3
SPMT 386	Leadership in Athletic Administration and Sport Management <sup>1</sup>	3
SPMT 394	Sport Marketing (Junior) <sup>1</sup>	3
SPMT 396	Selling in the Sport Industry (Junior) <sup>1</sup>	3
SPMT 406	Sport Fundraising and Event Management (Senior) <sup>1</sup>	3
SPMT 450	Sport Management Internship (last semester) <sup>1</sup>	12
SPMT 486	Sport Law and Facilities (Senior) <sup>1</sup>	3
SPMT 494	Sport Management Senior Seminar (Senior) <sup>1</sup>	3
SPMT 499	Sport Management Research Methods (Senior) <sup>1</sup>	3
Subtotal		54
<b>Total Hours</b>		<b>58</b>

<sup>1</sup> Course counts for 50% of Major and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Recommended Electives (20 credits)

Code	Title	Hours
<b>Select 20 credits of 300 level or above classes</b>		
The Department of SPMT recommends courses to be taken from Accounting, Communication, Economics, Finance, Management or Marketing or:		
Any 300 level or above courses that lead to the Minor in Leadership		
Any 300 level or above courses that lead to the Minor in Physical Education/Coaching		
Any 300 level or above courses that lead to the Minor in a Foreign Language		
This will help you complete a minor if you are interested. See your MyRockAudit for details.		

## Additional Requirements

Code	Title	Hours
<b>Required Volunteer Hours</b>		
Volunteer Hours - 120 hours minimum		

Required to pass the Senior Comprehensive Exam prior to Internship

### Required First Aid & CPR Certification

Students must become certified in both First Aid & CPR. This can be accomplished by:

Take a course (Red Cross or YMCA)

SAFE 205 First Aid and Safety

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. These opportunities can deepen and enhance the learning in accounting, economics and finance. In addition, there is a strong correlation between long-term student success and engagement in these opportunities:

1. Becoming involved in professional organizations
2. Attending sport industry related conferences, seminars, and workshops
3. Networking with SRU Sport Management alumni
4. International study programs (short-term, semester, and year-long)
5. High-Impact Practice (HIP) designated classes
6. Student leadership and career education development
7. Service-learning classes

SPORT MANAGEMENT - BS (2150)

This program is effective as of Spring 2020.

Revised 08.07.20

UCC 05.13.20

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
SPMT 194	Introduction to Sport Management	3
SPMT 196	Global Sport Management	3
ENGL 102	Critical Writing	3
ESAP 101	FIRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
<b>Hours</b>		<b>16</b>

**Spring**

SPMT 150	Sport Management Practicum	1
SPMT 294	Sport Management and Ethics	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
SCI 101	Science of Life	3
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>

**Second Year****Fall**

SPMT 150	Sport Management Practicum	1
SPMT 269	American Sport in the 21st Century	3
SPMT 386	Leadership in Athletic Administration and Sport Management	3
SCI 102	Understanding the Physical World	3
Humanities Inquiry (p. 29)		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>16</b>

**Spring**

SPMT 286	Sport Communication and Technology	3
SPMT 315	Diversity Issues in Sport Management	3
Social Science Inquiry (p. 29)		3
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>

**Third Year****Fall**

SPMT 150	Sport Management Practicum	1
SPMT 394	Sport Marketing	3
SPMT 369	Sport Budgeting and Finance	3
Thematic Thread Requirement (p. 29)		3
Free Elective		5
<b>Hours</b>		<b>15</b>

**Spring**

SPMT 150	Sport Management Practicum	1
SPMT 396	Selling in the Sport Industry	3
SPMT 406	Sport Fundraising and Event Management	3
SPMT 486	Sport Law and Facilities	3
Free Elective		3
<b>Hours</b>		<b>13</b>

**Summer**

SPMT 301	The Fan Experience (Suggested Free Elective )	3
<b>Hours</b>		<b>3</b>

**Fourth Year****Fall**

SPMT 494	Sport Management Senior Seminar	3
SPMT 499	Sport Management Research Methods	3
Free Elective		9
<b>Hours</b>		<b>15</b>

**Spring**

SPMT 450	Sport Management Internship	12
<b>Hours</b>		<b>12</b>
<b>Total Hours**</b>		<b>121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 2150

Revised: 08.26.2021

## Sport Management, Minor

The sport management degree program at Slippery Rock University has received specialized accreditation through the Commission on Sport Management Education (COSMA) located in Arlington, Virginia, USA. In 2010, the Department of Sport Management was the first program in the US to be accredited by the Commission on Sport Management Accreditation (COSMA), and in 2017 was the first program to be re-accredited.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Sport Management, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/sport-management/>)

Sport Management Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/departments/sport-management/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits

**"Prerequisites will be waived provided minor requirements are taken in sequential order."**

Code	Title	Hours
<b>Required Sport Management Courses</b>		
SPMT 150	Sport Management Practicum	1
SPMT 194	Introduction to Sport Management <sup>1</sup>	3
SPMT 450	Sport Management Internship <sup>2</sup>	3



SPMT 494	Sport Management Senior Seminar	3
Select nine credits from the following courses:		9
SPMT 269	American Sport in the 21st Century	
SPMT 286	Sport Communication and Technology	
SPMT 294	Sport Management and Ethics	
SPMT 315	Diversity Issues in Sport Management	
SPMT 369	Sport Budgeting and Finance	
SPMT 394	Sport Marketing	
SPMT 396	Selling in the Sport Industry	
SPMT 406	Sport Fundraising and Event Management	
SPMT 486	Sport Law and Facilities	
<b>Total Hours</b>		<b>19</b>

- <sup>1</sup> A grade of C or better must be earned in this course.
- <sup>2</sup> All courses must be completed in the minor prior to enrollment in the Internship.
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Minor in Sport Management (61C)

This program is effective as of Fall 2020.

Revised 08.25.20

UCC 03.05.20

## Strategic Communication and Media

Chair	Secretary	Location	Department Phone
Dr. Katrina Quinn	Hannah Azarian	222 Eisenberg Classroom Building	724-738-2032

Department Web Site URL (<https://www.sru.edu/academics/colleges-and-departments/cob/departments/communication/>)

Department Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/comm-fs.pdf>)

## Faculty

### Nicholas Artman

Associate Professor

Strategic Comm and Media

Ph.D., Indiana University of PA

M.A., Indiana University of PA

B.S., Indiana University of PA

### Brett Barnett

Professor

Strategic Comm and Media

Ph.D., Bowling Green State University

M.A., University of Akron

B.A., Ohio State University

### Franklyn Charles

Assistant Professor

Strategic Comm and Media

Ph.D., Ohio University

M.A., Ohio University

B.A., University of South Florida

### Daniel Dieter

Assistant Professor

Strategic Comm and Media

Ph.D., Indiana University of PA

M.A., Youngstown State University

B.S., Clarion University

### Emily Dolan

Assistant Professor

Strategic Comm and Media

Ph.D., University of Buffalo-SUNY

M.A., Syracuse University

B.A., Slippery Rock University

### Brittany Fleming

Associate Professor

Strategic Comm and Media

Ph.D., Indiana University of PA

M.A., Indiana University of PA

B.S., Indiana University of PA

### Thomas Flynn

Professor

Strategic Comm and Media

Ph.D., University of Nebraska

M.A., Ohio University

B.A., University of Toledo

### David Keppel

Associate Professor

Strategic Comm and Media

Ph.D., Indiana University of Pennsylvania

M.S., Rochester Institute of Technology

B.S., Slippery Rock University

### Fadoua Loudiy

Assistant Professor

Strategic Comm and Media

Ph.D., Duquesne University

M.A., University of Pittsburgh

B.A., Mohammed V University

### Michele Papakie

Associate Professor

Strategic Comm and Media

D.Sc., Robert Morris University

M.A., California University of Pennsylvania

B.A., Indiana University of Pennsylvania

### Christine Pease-Hernandez

Associate Professor  
Strategic Comm and Media  
Ph.D., Bowling Green University M.A.  
M.A., Central Michigan University  
B.A., Saginaw Valley State University

#### Allison Peiritsch

Associate Professor  
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Ph.D., Duquesne University  
M.A., Duquesne University  
B.A., Indiana University of PA

#### Li Pu

Associate Professor  
Strategic Comm and Media  
Ph.D., University of Oregon  
M.S., Southern Illinois University  
B.A., Sichuan International Studies University

#### Katrina Quinn

Professor  
Strategic Comm and Media  
Ph.D., Indiana University of Pennsylvania  
M.A., Indiana University of Pennsylvania  
B.A., University of Notre Dame

#### Md Nazmul Rony

Assistant Professor  
Strategic Comm and Media  
M.B.A., Gaylord College  
M.B.A., University of Dhaka  
B.B.A., University of Dhaka

#### Douglas Strahler

Associate Professor  
Strategic Comm and Media  
Ed.D., Duquesne University  
M.S., Syracuse University  
B.S., Slippery Rock University

## Programs

### Majors

- Strategic Communication and Media, Bachelor of Arts (BA) (p. 133)
- Strategic Communication and Media, Bachelor of Science (BS) - Concentration in Advertising (p. 135)
- Strategic Communication and Media, Bachelor of Science (BS) - Concentration in Converged Journalism (p. 138)
- Strategic Communication and Media, Bachelor of Science (BS) - Concentration in Digital Media Production (p. 140)
- Strategic Communication and Media, Bachelor of Science (BS) - Concentration in Health Communication (p. 143)
- Strategic Communication and Media, Bachelor of Science (BS) - Concentration in Integrated Marketing Communication (p. 146)
- Strategic Communication and Media, Bachelor of Science (BS) - Concentration in Public Relations (p. 149)

### Minors

- Communication - Graphic Design, Minor (Art Majors Only) (p. 131)
- Strategic Communication and Media, Minor (p. 152)

## Certificates

- Global and Intercultural Communication, Certificate (p. 132)

## Courses

### COMM 110 - Communication Concepts

An overview of basic theories concerning the communication process. Recommended as a basis for major study in the area.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Transfer Thread Completion Course

### COMM 115 - Visual Literacy

A cornerstone course that involves the study of visual forms of communication with an emphasis on image-based media (newspaper, magazine, film, television, photography, informational graphics, interactive multimedia, digital games and web-based technologies). Topics include visual interpretation, visual manipulation, visual conventions, the role of visual media in cultural processes, and aesthetic appreciation.

Credits: 3

Term(s) Typically Offered: Offered Fall, Winter, & Spring

Thematic Thread(s): Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

### COMM 120 - Introduction to Digital Photography

This course provides an introduction to the basic concepts of digital photography. Technical and compositional elements for the creation of quality digital photography are covered. Focus on this course is on the commercial application of photography for media production.

Credits: 3

Term(s) Typically Offered: Offered as Needed

### COMM 139 - Foundations of Academic Discovery

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**COMM 170 - Communicology**

This course will introduce students to the methods of social science inquiry with an emphasis on how to analyze social trends and propose solutions to social problems facing our world within local, national, and/or global communities. Students will learn about social scientific concepts, theories, and research as they investigate the dynamic processes of understanding and sharing meaning in diverse contexts. (3 credits). No prerequisites.

Credits: 3

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**COMM 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**COMM 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**COMM 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**COMM 200 - Civil Discourse: Theory & Practice**

Theory and practice of promoting shared understanding and the common good through civil discourse as related to the development and presentation of oral messages. Students will be expected to develop an understanding of the principles and practices of public speechmaking that constitute civil discourse, how the First Amendment enables it, its history and role in problem-solving, and the influence of mediated discourse on democracy.

Credits: 3

Term(s) Typically Offered: Offered Every Term

**COMM 201 - Digital Imaging**

This course exposes students to the use and manipulation of electronically generated images through hands-on experience with digital cameras and scanners. Market specific imaging software is used to further enhance and manipulate imagery. Course topics include visual aesthetics, composition, image layering, photo-retouching, spatial relationships, compression techniques, digital painting, editing, color adjustment, filtering, image capture and file formatting.

Credits: 3

Enrollment limited to students with department of Strategic Comm and Media.

**COMM 204 - Environmental Communication**

In this course, students will learn about the theoretical and applied concepts that guide the discipline of environmental communication including rhetoric & discourse, media, public participation, social marketing, collaboration & conflict resolution, risk communication, and pop culture. Students will demonstrate understanding and show application of materials for successful environmental communication in a variety of protected areas and conservation settings.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

**COMM 205 - Audio Production**

An introduction to the aesthetic and technical production of audio for a variety of media and disciplines. Course topics include principles of hearing, sound, acoustics, and psychoacoustics, field and studio recording techniques, tools and applications for single and multi-track production and editing; and the development of vocal techniques associated with on-air announcing for radio, television and online productions.

Prerequisite: COMM 110<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1 may **not** enroll.

**COMM 215 - Small Group Communication**

Communication problems and processes in small groups. Topics include role and nature of the small group, communication structure, problem-solving techniques, and leadership.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Transfer Thread Completion Course

**COMM 217 - Intercultural Communication**

This course is designed to create a greater understanding of communication patterns and breakdowns which occur as members of one culture group interact with those of another culture group. This course will also develop an increased awareness of particular skills and knowledge that can foster more effective intercultural communication.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**COMM 228 - Principles of Creative Advertising**

This course introduces students to the history, role and context of advertising and how advertising messages solve communication problems by informing, changing attitudes and motivating behavioral changes among an organization's target audiences. Students will learn fundamentals about the advertising development and execution process, including theory and strategy, copy writing, design and selection of media.

Credits: 3

Term(s) Typically Offered: Offered as Needed, Offered Spring Terms Even

**COMM 231 - Principles of Integrated Marketing Communication & Public Relations**

This course seeks to introduce students to the principles of integrated marketing communication and public relations. Students will examine the strategy and tactics through which professional communicators seek to engage audiences to establish and maintain relationships between a brand/organization and its publics. In doing so, the course addresses audience analysis, audience behavior, brand messaging, strategic planning, data analysis & metrics, message strategies & tactics, digital and social media, ethics and regulation. Assignments engage students in analysis relevant to professional practice.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**COMM 232 - Publication Production**

This course will be concerned with the nonverbal aspects of print communication, i.e., areas by which the communication process can be enhanced by the use of pictures, charts, graphs, white space, type faces and sizes, etc. It seeks to make students aware of the fact that print communication does not involve only words.

Credits: 3

**COMM 235 - Introduction to Digital Design**

Exposes students to the manipulation of digital images and their use in digital publication through hands-on experience with market-specific software. Course topics include visual aesthetics, composition, spatial relationships, type-faces, and file formatting.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**COMM 242 - Media Writing**

Basic course in media writing techniques and news writing for print, broadcast, and online media platforms. Students practice and write news stories utilizing standard media editing, organization, style, sourcing, and quotation modes.

Prerequisite: ENGL 102<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**COMM 247 - Photojournalism**

Photojournalism upholds the professional standards specific to newspaper photography and the recording of news events visually. Students will be introduced to basic photography skills and required to shoot assignments according to print standards on deadline. The course includes issues related to the specialization of shooting sports, spot news, features and special essays. Technical aspects of digital photography and printing for publication are also reviewed.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

**COMM 248 - Interactive Multimedia 1**

An introduction to the production of written and media-based content for a variety of web-based applications. Course topics include the use of content management systems, the basics of web design and blog creation, writing for the web, making media for the web, connecting to social media and web analytics.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**COMM 254 - Video Production**

An introduction to video production as communication media. Emphasis on the processes and technologies of single-camera production, including: (1) operation of audio and video recording equipment, and (2) development of techniques for composition, lighting, scriptwriting, storyboarding, directing, and editing.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**COMM 256 - Message Preparation**

An introduction to message preparation for a variety of media and communication functions, including radio, television, video, podcasts, instructional media, social media, websites, and advertising.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Strategic Comm and Media.

**COMM 257 - Recording and Producing in the Audio Industry**

To better comprehend and appreciate the industry, this course will introduce students to the business of audio production and publishing. The course will address the elements of recording contracts, production and recording royalties, producing rights, and copyright laws within the audio industry. Students gain valuable knowledge in the legal and business areas within the recording industry.

Credits: 3

**COMM 258 - Interactive Multimedia 2**

An introduction to the aesthetic and technical production of basic multimedia content for a variety of applications and disciplines. Course topics include basic aesthetics of multimedia, and introduction to media coding and industry specific applications, and development of graphic, animated, and interactive media assets.

Prerequisites: COMM 235<sup>D</sup> or COMM 201<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**COMM 263 - Mass Media and Society**

An introduction to the mass media that includes an examination of the historical development, current structure, and functions of the traditional and emerging media. The course will also explore the economic, legal, and ethical issues facing the media and introduce the interaction of the media and society, culture, and the individual.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

**COMM 270 - Strategic Health Communication**

This course examines strategic communication in the areas of health and the healthcare system, current events and issues in health communication, and the role of media and communication technologies in reaching individuals, communities, and specialized target audiences. Topics such as diversity, crisis communication, and ethics in the context of health communication will be addressed. Students will learn how to apply persuasive strategies and health communication tactics in the development of health communication campaigns.

Credits: 3

**COMM 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**COMM 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**COMM 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**COMM 303 - Communication and Media Ethics**

This course will address the application of ethical standards, guidelines, and policies to situations related to media and to communication. This course is based on two fundamental premises: (1) we create the sort of person that we are through our actions and inactions, and (2) an ethical communicator is one who acts with integrity. This course will cover what constitutes communication ethics from various historical points of view, how recent ethical conflicts have arisen in media production and communication, and how to apply ethical judgments to issues and controversies.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 305 - Broadcast Journalism**

An examination of topics critical to practice of broadcast journalism, including researching, news-gathering techniques, writing, and production skills. The course will also introduce the components of the broadcasting system in America including economics, programming, regulations, and broadcast technologies.

Prerequisites: (COMM 242<sup>D</sup> or COMM 256<sup>D</sup>) and COMM 110<sup>C</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 307 - Social Media**

This course will provide students with a professional approach to using social media tools in their field, examining both the technological and theoretical perspectives of social media through the hands-on application of the technologies.

Prerequisite: COMM 110<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment is limited to students with a program in Communication, Comm-Graphic Design(Art Major), Communication Studies, Strategic Communication&Media, Communication, Strategic Communication&Media, Environ Comm & Heritage Interp, Advertising, Converged Journalism, Digital Media, Integrated Marketing or Public Relations.

**COMM 310 - Communication Research Methods**

An introduction to the principles, procedures, and tools of research used in the analysis of the communication situation, including consideration of research design and statistical analysis and the identification, control, and measurement of communication variables.

Prerequisite: COMM 110<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 312 - Argumentation**

A study of argumentation as a decision-making process. Course focuses on theories of argument, the roles of advocates and opponents, the nature of argument building, evidence, and reasoning and argument in various contexts.

Prerequisites: COMM 200<sup>C</sup> and COMM 110<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 314 - Interpersonal Communication**

This is a theory-based course examining the process of communication in dyadic and group settings. Emphasis is placed upon (1) influences upon communication processes and resulting behavior and content and (2) the development of skills and skill assessment in both settings.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**COMM 315 - Organizational Communication**

A study of the communication behavior of persons in organizations. Considers the nature of organizations, communication structures in organizations, and the development of communication training in organizations.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 317 - Topics in Global and Intercultural Communication**

To promote effective communication with diverse audiences in an increasingly globalized world, this course develops theoretical and applied approaches to global and intercultural communication. Through readings, resources, and case studies, students will explore intercultural communication in a variety of global contexts, analyze current global communication issues, and develop the ability to design communication strategies that are specific and adapted to an audience's historical and cultural milieu.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 318 - Professional Presentation**

Principles and applications of communication techniques and media for presentations and processes common to professional settings.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 332 - Case Studies in Public Relations and Integrated Communication**

This advanced course seeks to develop critical thinking skills through the examination of audience-centered case studies. Students examine how professionals in public relations and integrated communication develop objectives that translate into communication campaigns, illustrating theoretical applications in real-life situations. The development of analytical skills, ethical guidelines, and issues of diversity in communication practice are emphasized.

Prerequisites: COMM 231<sup>D</sup> and COMM 110<sup>C</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 333 - Writing for Public Relations and Integrated Marketing Communication**

Course seeks to further develop the writing skills of public relations and integrated marketing communication majors. Course assignments focus on expanding students' ability to make critical decisions regarding the process of gathering necessary information, identifying objectives, and creating appropriate messages for specific target audiences.

Prerequisites: (COMM 242<sup>D</sup> or COMM 256<sup>D</sup>) and COMM 231<sup>D</sup> and COMM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 334 - Publication Production**

The course continues to expose students to the in-depth study of electronic publication issues, specifically with design and layout for newspapers, annual reports and other multiple-page publications. The course covers issues related to prepares, separations, advanced topography and paper selection.

Prerequisites: (COMM 235<sup>D</sup> or COMM 232<sup>D</sup>) and COMM 110<sup>C</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 335 - Digital Animation**

An exploration of the aesthetic and technical production of animated and interactive assets for a variety of media applications. Course topics include development of raster and vector graphic elements and design and production of both simple and interactive animation for a variety of applications and disciplines.

Prerequisites: (COMM 235<sup>D</sup> or COMM 201<sup>D</sup>) and COMM 110<sup>C</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 336 - Media Relations and Crisis Communication**

This course focuses on two key areas of public relations and crisis communication. During the first half of the semester, this course will explore how the news media works and how PR practitioners establish and maintain positive relationships with the news media. This course will explain the role of the news media in message dissemination and how to effectively work with reporters. During the second half of the semester, students will build on their media relations knowledge and explore issues and crisis management - before, during and after a crisis. Students will learn common crisis response strategies to address many organizational audiences through well-known case studies. Emphasis will be placed on practical application of crisis communication theory.

Prerequisites: COMM 110<sup>C</sup> and COMM 231<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

Enrollment limited to students in the College of Business college.

**COMM 342 - Sports Journalism**

Discussion of ethics and responsible sports journalism, sports information and public relations interview techniques, broadcast sports journalism. Guest lecturers in sports information, public relations, and broadcast journalism may speak on relevant topics.

Prerequisites: COMM 242<sup>D</sup> and COMM 110<sup>C</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 343 - Feature Journalism**

Course will focus on writing feature articles for newspapers and magazines.

Prerequisites: COMM 242<sup>D</sup> and COMM 110<sup>C</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 347 - New-Media Journalism**

An examination of new-media forms and the effects of new digital media on media industries and the practice of journalism. The course will examine the differences between traditional and new media journalism in theory and in practice and explore online writing techniques and the impact of social networking sites on the practice of journalism.

Prerequisites: (COMM 242<sup>D</sup> or COMM 248<sup>D</sup> or COMM 256<sup>D</sup>) and COMM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 348 - Advanced Journalistic Writing and Reporting**

Instruction in writing and reporting techniques beyond the basic news story, focused on detailed, in-depth news-writing and news-gathering practices, including use of human and documentary sources, toward production of public affairs stories; discussions of contemporary journalistic ethics and values.

Prerequisites: COMM 242<sup>D</sup> and COMM 110<sup>C</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 350 - Editing for Video**

This course provides students with the opportunity to expand their knowledge of video editing. Special attention is given to expanding skill sets associated with digital non-linear editing.

Prerequisites: COMM 254<sup>D</sup> and COMM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 352 - Digital Radio Production**

This course introduces students to the business and production of digital radio broadcasting, including broadcast technology, producing, directing, writing, and performance for radio. Students gain experience in studio and control room operation and production roles.

Prerequisite: COMM 110<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Strategic Comm and Media.

**COMM 354 - TV Studio Production**

The course covers the process and technique of multi-camera video production. Students gain experience in studio and control room operation and production roles. The course trains students to integrate video packages produced in the field for presentation in a multi-camera studio broadcast.

Prerequisite: COMM 110<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 355 - TV Field Production**

An advanced course in the processes and techniques of single-camera field production and editing. Students will report, film, write, and edit packages for television news.

Prerequisite: COMM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 359 - Interactive Multimedia 3**

This course provides students the ability to move beyond the traditional models of information distribution using image, sound, motion and text. The course introduces the fundamentals of communicating through digital interfaces with an audience. Topics include digital imaging, creating effective interactive projects, models of information structure, analysis of design problems and distribution models. Theories of communication, learning, human-centered design and project evaluation are discussed.

Prerequisites: COMM 258<sup>D</sup> and COMM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 360 - Corporate Media**

The application of adult training theories, communication theories, and production skills in the planning, design, and implementation of media in the corporate and institutional setting, with emphasis on media management and the use of media in training and development.

Prerequisites: (COMM 235<sup>D</sup> or COMM 232<sup>D</sup>) and COMM 110<sup>C</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 364 - Strategic Brand Communication**

This course provides insights on developing strategic brand communication strategies. This course offers essential concepts, frameworks, theories, practices, and skills required to create and manage strategic brand communications.

Prerequisites: COMM 231<sup>D</sup> or MRKT 330<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

Enrollment limited to students in the College of Business college.

**COMM 365 - Sports and Esports Production**

The course prepares students to broadcast sports and esports events and news. Topics covered include media production, play-by-play announcing, studio sportscasts, field reporting, pre-game and post-game analysis, social media integration, streaming, and content creation for live sports broadcasts.

Credits: 3

**COMM 370 - Health Communication Cases and Strategies**

This course further develops students' strategic competencies in the area of health communication through the investigation of case studies and campaign design. Students will analyze proactive and responsive communication strategies; messaging techniques and audience segmentation; multimedia and multiplatform tactics; and media relations and crisis response. Students will utilize qualitative and quantitative research techniques to drive messaging and strategy in the creation of integrated health communication campaigns.

Prerequisite: COMM 270<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2 or Sophomore 2.

Enrollment limited to students in the College of Business college.

**COMM 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Prerequisite: COMM 110<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisite: COMM 110<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 401 - Digital Imaging**

This course continues to expose students in the use, manipulation and creation of digital images through hands-on experience with market specific imaging software. Course topics include visual aesthetics, image composition, vector graphics, typography, image scalability and file formatting.

Prerequisites: (COMM 235<sup>C</sup> or COMM 201<sup>C</sup>) and COMM 110<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 405 - Global Media**

An examination of different regions of the world and their media systems. The course will explore how politics, economics and culture play a role in shaping global media structures. Both historical and contemporary perspectives on the topic are addressed, particularly as they relate to issues of democracy, cultural autonomy, political rights, social justice, media systems of different world regions, global representations in U.S. media, new technologies and developments in global technology and economic media developments.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 407 - Social Media Network Analytics**

COMM 407 examines the core concepts of social media networks and the process of collecting, analyzing, measuring, and visualizing data for organizations and businesses. The course emphasizes understanding the role of theories in social media analytics and the tools that help collect and analyze social media data and prepare reports. Students learn and work on data analytics software in this advanced-level course for their assignments and projects.

Prerequisite: COMM 307<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

**COMM 410 - Communication Law**

Discussion of topics related to the field of mass communication (freedom of the press, libel, invasion of privacy, copyright, obscenity, regulations, ethics, and responsibility of the communicator and the agency).

Credits: 3

Term(s) Typically Offered: Offered Every Term

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

**COMM 413 - Communication Theory**

A study of the significant theories of human communication that help to explain and predict the role of communication in determining the social, cultural, and political behavior of the community.

Prerequisite: COMM 110<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 415 - Persuasion**

This course will familiarize students with the processes of persuasion, the relationship of persuasion to other forms of human communication, methods for studying persuasion, the theories of persuasion and ethical concerns about persuasion. The perspectives and tools developed in this course should enable the student to develop effective message strategies in work and personal situations.

Prerequisites: COMM 110<sup>D</sup> and COMM 200<sup>D</sup> and COMM 110<sup>C</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 419 - Propaganda: Ideology, Communication Warfare, and Social Control**

The purpose of this course is to enhance the critical thinking and analytical skills of students to make them better able to cope intellectually with public argument in a world of where sound-bites and terrorism rule the day. This course addresses the ways in which various ideologies compete for global dominance by employing advocacy strategies and propaganda techniques, a process made both more complex and more consequential by rapidly advancing communication technologies. By manipulating visual imagery, propagandists often exert control over the public's perception of political, social and economic reality. Extensive use of art and video examples will be made in this course.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 422 - History of Journalism**

Tracing the history of American journalism from its early English European heritage to modern times. Emphasis on people, organization, and media that have helped establish the press as an American institution.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 431 - PR and IMC Campaigns Capstone**

Capstone course in the PR, IMC and Health Communication concentrations. Course provides students a thorough experience in conducting public relations and integrated marketing communication campaigns and preparing communication materials. Working in teams, students prepare and conduct the research, planning, implementation and evaluation of an actual campaign for a client.

Prerequisites: (COMM 332<sup>D</sup> or COMM 336<sup>D</sup> or COMM 370<sup>D</sup>) and COMM 333<sup>C</sup> and COMM 110<sup>C</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**COMM 434 - Advertising Production**

Advanced production course which applies concepts of design, creative strategy and message development to the creation of advertising in a variety of mediums. Course focuses on development of consumer, public service and public relations advertising campaigns.

Prerequisites: (COMM 235<sup>D</sup> or COMM 232<sup>D</sup>) and COMM 110<sup>C</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**COMM 441 - Issues in Journalism**

An analysis and discussion of the impact of journalism on contemporary society. Among the subjects discussed will be the evolution of journalism in a digital age, ethical concerns for modern journalists, and the impact of mobile technology on the practice of journalism.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 449 - Communication Projects**

This course provides students an opportunity to investigate in-depth, approved topics in applied communication.

Prerequisite: COMM 110<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 450 - Internship**

Supervised placement or research in selected private or public agencies.

Prerequisite: COMM 310<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-12

Term(s) Typically Offered: Offered Every Term

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**COMM 453 - Media Project Management**

This course is intended to develop student mastery of the emerging environment of digital information through a project-based, team-based course. The course focuses on issues of team work, project management, strategy development and communication both inside and outside of the team. Other topics include budgeting, development of human capital, leadership, time management and legal issues.

Prerequisites: COMM 258<sup>D</sup> and (COMM 307<sup>D</sup> or COMM 347<sup>D</sup>) and (COMM 359<sup>D</sup> or COMM 401<sup>D</sup>) and COMM 110<sup>C</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 454 - Live Broadcast Production**

This course will teach students visual aesthetic principles and technical skills required to produce live programming and graphics for broadcast. Course topics include objective development, composition, element layering, branding, and advanced multi-camera studio and field production.

Prerequisites: (COMM 235<sup>D</sup> or COMM 201<sup>D</sup>) and COMM 350<sup>D</sup> and COMM 354<sup>D</sup> and COMM 110<sup>C</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 455 - History of Broadcasting**

A focus on the history and development of radio and television broadcasting in the United States. Students will watch and listen to historical broadcasts and discuss the evolution of entertainment and news programming from the beginning of the 20th century through today.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 458 - Media Criticism**

A critical examination of film, television, and radio. The course focuses on the formation and application of standards for appraising media and their messages.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Thematic Thread(s): Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**COMM 459 - Issues in Communication Technologies**

An exploration of current and emerging communication technologies including their development and regulation, as well as the social, individual and ethical impact of these technologies.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 464 - Advertising Campaigns Capstone**

This course is a capstone course in the Advertising program. Students will demonstrate how the knowledge and skills learned in their program can be applied directly to designing and developing creative advertising campaigns. Students will be responsible for conducting research, strategic planning, writing creative briefs, planning and preparation of advertising copy and design, and campaign evaluation.

Prerequisites: COMM 228<sup>D</sup> and COMM 235<sup>D</sup> and COMM 310<sup>D</sup> and COMM 434<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Advertising.

**COMM 480 - The Communication Age**

Presentation and discussion of the influences, trends, and issues that permeate the evolution toward a 'Communication Age'. Major issues and influences are examined, including significant technological developments and solutions that have been applied to communication needs and opportunities. Discussion addresses marketplace forces; humanistic, social, personal, and ethical issues; and the impact on organizations, workplace, home, education, government, and international functions. Major attention is given to the role of the impact on the individual amidst these far-reaching changes.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 497 - Senior Capstone Seminar**

The seminar is designed to assist students develop career awareness and proficiency in career/job search skills relevant to obtaining an entry-level position in a communication-related field, or to obtain entry to graduate study. Students enrolled will participate in career development activities, including portfolio development, job seminars, establishing credential files, participating in mock and actual interviews, on-site mentoring/shadow program and public presentation of their portfolio.

Prerequisite: COMM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with department of Strategic Comm and Media.

**COMM 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisite: COMM 110<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Communication - Graphic Design, Minor (Art Majors Only)

The Minor in Communication: Graphic Design is specifically designed for Art majors who would like additional experience in digital design and production to complement their major coursework. This program provides students with the commercial and technical aspects of graphic communication and production. With courses in communication concepts, interactive multimedia, communication law, and media project management, this 21-credit program will expand opportunities to use an art degree in new and flexible ways.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Communication - Graphic Design, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/communication-graphic-design-minor/>)

Strategic Communication and Media Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/departments/communication/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits

Code	Title	Hours
<b>Required Communication Courses</b>		
COMM 110	Communication Concepts	3
COMM 235	Introduction to Digital Design	3
COMM 258	Interactive Multimedia 2	3
COMM 334	Publication Production	3
COMM 359	Interactive Multimedia 3	3
COMM 410	Communication Law	3
COMM 453	Media Project Management	3
<b>Total Hours</b>		<b>21</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN COMMUNICATION - GRAPHIC DESIGN (13B)

This program is effective as of Fall 2010

Revision date: 10.28.2021

UCC 3.5.2019

## Global and Intercultural Communication, Certificate

As issues of diversity and cross-cultural exchanges become a larger part of our personal and professional interactions, there is an increasing need to expand our knowledge and understanding of global communication practices. The Certificate in Global and Intercultural Communication will help students in all majors become ethical and inclusive communicators in the workplace and beyond.

The certificate consists of 12 credits with 6-9 credits in communication and 3-6 credits in selected courses from the fields of marketing, political

science, history, cultural studies, or languages to complement students' professional aspirations or other academic interests.

The Certificate in Global and Intercultural Communication is available to students in all majors

To access Certificate Requirements, please view the Curriculum Guide tab.

## Related Links

Global and Intercultural Communication, certificate Page (<https://www.sru.edu/academics/colleges-and-departments/cob/departments/strategic-communication-and-media/programs/>)

Strategic Communication and Media Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/departments/strategic-communication-and-media/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Overall GPA: 2.0 or higher

### CERTIFICATE REQUIREMENTS

Code	Title	Hours
<b>Required</b>		
Choose two or three courses (6-9 credits):		6-9
COMM 217	Intercultural Communication	
COMM 317	Topics in Global and Intercultural Communication	
COMM 405	Global Media	
Subtotal		6-9
<b>Electives</b>		
Choose one or two courses (3-6 credits):		3-6
ARAB XXX	Any Arabic Course	
CHIN XXX	Any Chinese Course	
FREN XXX	Any French Course	
HIST 462	The Contemporary Middle East	
HIST 463	Israel-History, State and Society	
JAPN XXX	Any Japanese Course	
KORN XXX	Any Korean Course	
MRKT 303	Issues in Global Business	
MRKT 437	International Marketing	
PHIL 140	World Religions	
POLS 103	International Relations	
POLS 220	Foreign Policy	
SPAN XXX	Any Spanish Course	
Subtotal		3-6
<b>Total Hours</b>		<b>12</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## ADDITIONAL CERTIFICATE REQUIREMENT

Students must complete at least 12 credit hours from SRU

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Certificate in Global and Intercultural Communication (2GIC)

Effective Summer 2021

Revised 06.29.2022

UCC 03.30.2021

## Strategic Communication and Media, Bachelor of Arts (BA)

### PROGRAM LEARNING OUTCOMES

#### Strategic COMMUNICATION and media, BA

- **Research & Analysis:** Demonstrate knowledge and proficiency in research and analysis relevant to the communication discipline.
- **Applied Skills:** Develop additional communication competencies through course selection within their degree requirements and through free electives. These additional competencies may include: design skills, media production skills, intercultural skills, journalistic skills, and public relations writing skills; or skills related to a minor program of study.
- **Advanced Skills: Knowledge of Communication Discipline:** Develop knowledge and understanding of the history, evolution, and fundamental theories of the discipline of communication.

### STRATEGIC COMMUNICATION AND MEDIA DEPARTMENT, OVERALL

- **Writing competency:** Students will demonstrate the ability to write and present messages clearly and effectively.
- **Ethics and legal issues:** Students will understand ethical and legal issues facing communicators in the 21st century.
- **Research and analysis:** Students will demonstrate the ability to design and implement research studies and critically analyze research data.

## RELATED LINKS

Strategic Communication and Media, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/communication-studies/>)

Strategic Communication and Media Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/departments/communication/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Modern Language Requirement	0-9
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	39
	Electives	39

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
Complete 0-9 credits		0-9
<b>Total Hours</b>		<b>0-9</b>

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## MAJOR REQUIREMENTS

- Students must earn a minimum grade of "C" in COMM 110, COMM 310, and COMM 413. At least 40 % (48 hours) of the entire degree and 50% (20 hours) of courses in the major must consist of upper level coursework.
- Students must complete 50% of credits required for the major from a PASSHE university.
- 20 major credits must be taken at SRU or PASSHE
- 20 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Strategic Communication &amp; Media Core</b>		
COMM 110	Communication Concepts <sup>1,2</sup>	3
COMM 310	Communication Research Methods <sup>1,2</sup>	3
COMM 413	Communication Theory <sup>1</sup>	3
COMM 497	Senior Capstone Seminar <sup>1</sup>	3
Subtotal		12
<b>Strategic Communication &amp; Media Requirements</b>		

Select 9 credits of the following:		9
COMM 215	Small Group Communication <sup>1</sup>	
COMM 303	Communication and Media Ethics <sup>1</sup>	
COMM 312	Argumentation <sup>1</sup>	
COMM 314	Interpersonal Communication <sup>1</sup>	
COMM 315	Organizational Communication <sup>1</sup>	
COMM 410	Communication Law <sup>1,2</sup>	
COMM 415	Persuasion <sup>1</sup>	
Subtotal		9
<b>Strategic Communication &amp; Media Electives</b>		
Select any six additional Strategic Communication & Media courses. At least 2 must be at the 300-level or above.		18
Subtotal		18
<b>Total Hours</b>		<b>39</b>

<sup>1</sup> Course counts for 50% of Major and Major GPA

<sup>2</sup> A grade of 'C' or higher must be earned in these courses

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

STRATEGIC COMMUNICATION AND MEDIA- BA (2 15)

This program is effective as of Summer 2022

Revision date: 04.15.22

UCC: 3.1.2022

## RECOMMENDED FOUR-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
COMM 110	Communication Concepts	3
Communication Elective		3
ENGL 102	Critical Writing	3
Creative & Aesthetic Inquiry (p. 29)		3
ESAP 101	FIRST Seminar *	1
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
COMM 200	Civil Discourse: Theory & Practice	3
Communication Elective		3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3

Modern Language Requirement	3
<b>Hours</b>	<b>15</b>
<b>Second Year</b>	
<b>Fall</b>	
Communication Elective	3
Modern Language Requirement	3
SCI 101                      Science of Life or SCI 102                      or Understanding the Physical World	3
Social Science Inquiry (p. 29)	3
Elective	3
Declare a Thematic Thread <sup>2</sup>	
<b>Hours</b>	<b>15</b>
<b>Spring</b>	
Communication Elective	3
Modern Language Requirement	3
Humanities Inquiry	3
SCI 102                      Understanding the Physical World or SCI 101                      or Science of Life	3
Elective	3
<b>Hours</b>	<b>15</b>
<b>Third Year</b>	
<b>Fall</b>	
COMM 310                      Communication Research Methods	3
Communication Elective	3
Thematic Thread Requirement (p. 29)	6
Electives	3
<b>Hours</b>	<b>15</b>
<b>Spring</b>	
Communication Studies Requirement	3
Communication Elective	3
Thematic Thread Requirement (p. 29)	3
Electives	6
<b>Hours</b>	<b>15</b>
<b>Fourth Year</b>	
<b>Fall</b>	
Communication Studies Requirement	6
Thematic Thread Requirement (p. 29)	3
Electives	6
<b>Hours</b>	<b>15</b>
<b>Spring</b>	
COMM 413                      Communication Theory	3
COMM 497                      Senior Capstone Seminar	3
Electives	9
<b>Hours</b>	<b>15</b>
<b>Total Hours**</b>	<b>121</b>

Revision date: 05.03.2022

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

## Strategic Communication and Media, Bachelor of Science (BS) - Concentration in Advertising

### PROGRAM LEARNING OUTCOMES

#### Strategic COMMUNICATION and Media - ADVERTISING, BS

- **Advertising Production:** Students will produce appropriately targeted advertising materials in a variety of formats.
- **Advertising Strategy:** Students will understand the role of advertising and how advertising messages solve communication problems by informing, changing attitudes, and motivating behavioral change among an organization's target audiences.
- **Advertising Campaigns:** Students will develop a research-based creative advertising campaign that includes strategic planning, writing creative briefs, planning, and preparing advertising copy and design and campaign evaluation.

#### STRATEGIC COMMUNICATION AND MEDIA DEPARTMENT, OVERALL

- **Writing competency:** Students will demonstrate the ability to write and present messages clearly and effectively.
- **Ethics and legal issues:** Students will understand ethical and legal issues facing communicators in the 21st century.
- **Research and analysis:** Students will demonstrate the ability to design and implement research studies and critically analyze research data.

### RELATED LINKS

Strategic Communication and Media - Advertising, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/communication-advertising/>)

Strategic Communication and Media Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/departments/communication/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

### CURRICULUM GUIDE

#### GPA REQUIREMENT

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.



**SUMMARY\***

Code	Title	Hours
	Rock Studies 2 Requirement	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	54
	Electives	24

\* All undergraduate degree programs require a minimum of 120 credits.  
Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

**ROCK STUDIES 2 REQUIREMENTS**

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

**Basic Math Requirement**

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

**Computer Competency**

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

**DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT**

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

**MAJOR REQUIREMENTS**

- 27 major credits must be taken at SRU or PASSHE
- 27 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Core Requirements</b>		
COMM 110	Communication Concepts <sup>1,2</sup>	3
COMM 263	Mass Media and Society <sup>1</sup>	3
COMM 310	Communication Research Methods <sup>1,2</sup>	3
COMM 410	Communication Law <sup>1,2</sup>	3
COMM 497	Senior Capstone Seminar <sup>1,2</sup>	3
Subtotal		15
<b>Advertising Requirements</b>		
COMM 115	Visual Literacy <sup>1</sup>	3
COMM 228	Principles of Creative Advertising <sup>1</sup>	3
COMM 235	Introduction to Digital Design <sup>1</sup>	3
COMM 256	Message Preparation <sup>1</sup>	3
MRKT 230	Principles of Marketing	3
MRKT 334	Advertising Management <sup>1</sup>	3
COMM 434	Advertising Production <sup>1</sup>	3
COMM 453	Media Project Management <sup>1</sup>	3
or COMM 464	Advertising Campaigns Capstone	
Subtotal		24
<b>Electives</b>		
Select four of the following:		12
COMM 120	Introduction to Digital Photography <sup>1</sup>	
COMM 254	Video Production <sup>1</sup>	
COMM 334	Publication Production <sup>1</sup>	
COMM 364	Strategic Brand Communication <sup>1</sup>	

COMM 401	Digital Imaging <sup>1</sup>	
ART 100	2-D Design	
ART 213	Intermediate Studio Graphic Design	
ART 313	Advanced Studio Graphic Design	
ART 413	Senior Studio Graphic Design	
MRKT 333	Consumer Behavior	
Subtotal		12
<b>Internship</b>		
COMM 450	Internship <sup>1</sup>	3
<b>Total Hours</b>		<b>54</b>

<sup>1</sup> Course counts for 50% of Major and Major GPA

<sup>2</sup> A grade of 'C' or higher must be earned in these courses

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

STRATEGIC COMMUNICATION & MEDIA- BS (2119)

Concentration in Advertising (ADVR)

This program is effective as of Summer 2022

Revision date: 04.15.2022

UCC 3.1.22

## RECOMMENDED FOUR-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
COMM 110	Communication Concepts	3
COMM 263	Mass Media and Society	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
ENGL 104	Critical Reading	3
COMM 115	Visual Literacy	3
MATH 117	Quantitative Reasoning	3

Humanities Inquiry (p. 29)	3
<b>Hours</b>	<b>15</b>

### Second Year

#### Fall

COMM 235	Introduction to Digital Design	3
Social Science Inquiry (p. 29)		3
SCI 101	Science of Life	3
Advertising Elective		3
Elective		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>

#### Spring

COMM 235	Introduction to Digital Design	3
COMM 256	Message Preparation	3
SCI 102	Understanding the Physical World	3
Thematic Thread Requirement (p. 29)		3
Elective		3
<b>Hours</b>		<b>15</b>

### Third Year

#### Fall

COMM 310	Communication Research Methods	3
MRKT 230	Principles of Marketing	3
Advertising Elective		3
Thematic Thread Requirement (p. 29)		3
Elective		3
<b>Hours</b>		<b>15</b>

#### Spring

MRKT 334	Advertising Management	3
Advertising Elective		3
Thematic Thread Requirement (p. 29)		3
Electives		6
<b>Hours</b>		<b>15</b>

### Fourth Year

#### Fall

COMM 410	Communication Law	3
COMM 434	Advertising Production	3
Advertising Elective		3
Thematic Thread Requirement (p. 29)		3
Electives		3
<b>Hours</b>		<b>15</b>

#### Spring

COMM 497	Senior Capstone Seminar	3
COMM 453 or COMM 464	Media Project Management or Advertising Campaigns Capstone	3
Advertising Elective		3
COMM 450	Internship	3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

- <sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.
- \* Students are encouraged to take ESAP 101 as a Free Elective.

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

Major Code: 2119  
Concentration Code: ADVR  
Revised: 05.03.2022

# Strategic Communication and Media, Bachelor of Science (BS) - Concentration in Converged Journalism

## PROGRAM LEARNING OUTCOMES

### Strategic COMMUNICATION and Media - CONVERGED JOURNALISM, BS

- **Converged Journalism:** Demonstrate the ability to write all elements of a basic news story following AP professional journalistic style, with proper content, grammar, style, and editing components.
- **Media Technology:** Employ new-media technologies in reporting.
- **Reporting & Investigating:** Employ advanced reporting and investigative skills.

### STRATEGIC COMMUNICATION AND MEDIA DEPARTMENT, OVERALL

- **Writing competency:** Students will demonstrate the ability to write and present messages clearly and effectively.
- **Ethics and legal issues:** Students will understand ethical and legal issues facing communicators in the 21st century.
- **Research and analysis:** Students will demonstrate the ability to design and implement research studies and critically analyze research data.

## RELATED LINKS

Strategic Communication and Media - Converged Journalism, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/communication-converged-journalism/>)

Strategic Communication and Media Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/departments/communication/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Major GPA: 2.0 or higher  
Overall GPA: 2.0 or higher

## SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	57
	Electives	21

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	

**Total Hours** **0-3**

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		

Select one of the following at SRU or another post-secondary institution:

CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	

**Total Hours** **0-3**

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## MAJOR REQUIREMENTS

- 29 major credits must be taken at SRU or PASSHE
- 29 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Core Requirements</b>		
COMM 110	Communication Concepts <sup>1,2</sup>	3
COMM 263	Mass Media and Society <sup>1</sup>	3
COMM 310	Communication Research Methods <sup>1,2</sup>	3
COMM 410	Communication Law <sup>1,2</sup>	3
COMM 497	Senior Capstone Seminar <sup>1</sup>	3
Subtotal		15
<b>Journalism Requirements</b>		
COMM 235	Introduction to Digital Design <sup>1</sup>	3
or COMM 248	Interactive Multimedia <sup>1</sup>	
COMM 242	Media Writing <sup>1,2</sup>	3
COMM 247	Photojournalism <sup>1</sup>	3
COMM 347	New-Media Journalism <sup>1</sup>	3
COMM 348	Advanced Journalistic Writing and Reporting <sup>1</sup>	3
COMM 354	TV Studio Production <sup>1</sup>	3
COMM 355	TV Field Production <sup>1</sup>	3
COMM 450	Internship <sup>1</sup>	3-12
Subtotal		24-33
<b>Journalism Electives</b>		
Select 6 courses (at least two must be at the 400 level)		18
COMM 205	Audio Production <sup>1</sup>	
COMM 235	Introduction to Digital Design <sup>1</sup>	
COMM 248	Interactive Multimedia <sup>1</sup>	

COMM 254	Video Production <sup>1</sup>	
COMM 307	Social Media <sup>1</sup>	
COMM 334	Publication Production <sup>1</sup>	
COMM 342	Sports Journalism	
COMM 365	Sports and Esports Production	
COMM 405	Global Media <sup>1</sup>	
COMM 422	History of Journalism <sup>1</sup>	
COMM 441	Issues in Journalism <sup>1</sup>	
COMM 454	Live Broadcast Production <sup>1</sup>	
COMM 455	History of Broadcasting <sup>1</sup>	

Subtotal 18

**Total Hours** **57-66**

<sup>1</sup> Course counts for 50% of Major and Major GPA

<sup>2</sup> A grade of 'C' or higher must be earned in these courses

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

STRATEGIC COMMUNICATION & MEDIA- BS (2119)

Concentration in Converged Journalism (CVJR)

This program is effective as of Summer 2022

Revised 06.02.2022

UCC 3.1.22

## RECOMMENDED FOUR-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
COMM 110	Communication Concepts	3
COMM 263	Mass Media and Society	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
ENGL 104	Critical Reading	3

COMM 235 or COMM 248	Introduction to Digital Design or Interactive Multimedia 1	3
MATH 117	Quantitative Reasoning	3
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
COMM 242	Media Writing	3
SCI 101	Science of Life	3
Converged Journalism Elective		3
Social Science Inquiry (p. 29)		3
Elective		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
COMM 247	Photojournalism (S)	3
SCI 102	Understanding the Physical World	3
Converged Journalism Elective		3
Thematic Thread Requirement (p. 29)		3
Electives		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
COMM 310	Communication Research Methods	3
COMM 347	New-Media Journalism	3
Converged Journalism Elective		3
Thematic Thread Requirement (p. 29)		3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
COMM 355	TV Field Production	3
Thematic Thread Requirement (p. 29)		3
Converged Journalism Elective		3
Electives		6
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
COMM 410	Communication Law	3
COMM 354	TV Studio Production	3
Converged Journalism Elective		3
Thematic Thread Requirement (p. 29)		6
Elective		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
COMM 497	Senior Capstone Seminar	3
COMM 348	Advanced Journalistic Writing and Reporting	3
COMM 450	Internship	3
Converged Journalism Elective		3

Electives	3
<b>Hours</b>	<b>15</b>
<b>Total Hours**</b>	<b>121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 2119

Concentration Code: CVJR

Revised: 05.03.2022

## Strategic Communication and Media, Bachelor of Science (BS) - Concentration in Digital Media Production

### PROGRAM LEARNING OUTCOMES

#### Strategic COMMUNICATION and Media - DIGITAL MEDIA PRODUCTION, BS

- **Writing:** Develop written skills in visual, audio, and digital platforms to design effective messages.
- **Production Skills:** Develop production skills in the visual, audio, and digital platforms to design effective messages.
- **Project Management:** Incorporate the design skills of needs assessment, message design, and evaluation when developing, producing, and evaluating a media project.

#### STRATEGIC COMMUNICATION AND MEDIA DEPARTMENT, OVERALL

- **Writing competency:** Students will demonstrate the ability to write and present messages clearly and effectively.
- **Ethics and legal issues:** Students will understand ethical and legal issues facing communicators in the 21st century.
- **Research and analysis:** Students will demonstrate the ability to design and implement research studies and critically analyze research data.

### RELATED LINKS

Strategic Communication and Media - Digital Media Production, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/communication-digital-media-production/>)

Strategic Communication and Media Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/departments/communication/>)



Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	51
	Electives	27

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

### MAJOR/CONCENTRATION REQUIREMENTS

- 26 major credits must be taken at SRU or PASSHE
- 26 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Core Requirements</b>		
COMM 110	Communication Concepts <sup>1,2</sup>	3
COMM 263	Mass Media and Society <sup>1</sup>	3
COMM 310	Communication Research Methods <sup>1,2</sup>	3
COMM 410	Communication Law <sup>1,2</sup>	3
COMM 497	Senior Capstone Seminar <sup>1</sup>	3
Subtotal		15
<b>Digital Media Fundamentals</b>		
COMM 235	Introduction to Digital Design <sup>1</sup>	3
COMM 248	Interactive Multimedia <sup>1</sup>	3
COMM 254	Video Production <sup>1</sup>	3
COMM 256	Message Preparation <sup>1</sup>	3
Subtotal		12
<b>Emphasis</b>		

Select Emphasis from the following: 15

Multimedia Emphasis (p. 142)
Audio Production Emphasis (p. 142)
Television and Video Production Emphasis (p. 142)

**Digital Media Electives**

Select 2 of the following (at least one course must be 300 level or higher): 6

COMM 205	Audio Production <sup>1</sup>
COMM 231	Principles of Integrated Marketing Communication & Public Relations <sup>1</sup>
COMM 247	Photojournalism <sup>1</sup>
COMM 257	Recording and Producing in the Audio Industry <sup>1</sup>
COMM 258	Interactive Multimedia 2 <sup>1</sup>
COMM 307	Social Media <sup>1</sup>
COMM 334	Publication Production <sup>1</sup>
COMM 335	Digital Animation <sup>1</sup>
COMM 347	New-Media Journalism <sup>1</sup>
COMM 350	Editing for Video <sup>1</sup>
COMM 352	Digital Radio Production <sup>1</sup>
COMM 354	TV Studio Production <sup>1</sup>
COMM 355	TV Field Production <sup>0</sup>
COMM 365	Sports and Esports Production
COMM 401	Digital Imaging <sup>1</sup>
COMM 434	Advertising Production <sup>1</sup>
COMM 459	Issues in Communication Technologies <sup>1</sup>
COMM 480	The Communication Age <sup>1</sup>

Subtotal 21

**Internship**

COMM 450	Internship (3-12 credits) <sup>1</sup>	3
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**Total Hours** 51<sup>1</sup> Course counts for 50% of Major requirements and Major GPA<sup>2</sup> A grade of 'C' or higher must be earned in these courses

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**Audio Production Emphasis**

Code	Title	Hours
COMM 205	Audio Production <sup>1</sup>	3
COMM 257	Recording and Producing in the Audio Industry <sup>1</sup>	3
COMM 350	Editing for Video <sup>1</sup>	3
COMM 352	Digital Radio Production <sup>1</sup>	3
COMM 453	Media Project Management <sup>1</sup>	3

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**Multimedia Emphasis**

Code	Title	Hours
COMM 258	Interactive Multimedia 2 <sup>1</sup>	3
COMM 307	Social Media <sup>1</sup>	3
or COMM 347	New-Media Journalism	
COMM 359	Interactive Multimedia 3 <sup>1</sup>	3
COMM 401	Digital Imaging <sup>1</sup>	3
COMM 453	Media Project Management <sup>1</sup>	3

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**Television and Video Production Emphasis**

Code	Title	Hours
COMM 205	Audio Production <sup>1</sup>	3
COMM 350	Editing for Video <sup>1</sup>	3
COMM 354	TV Studio Production <sup>1</sup>	3
COMM 355	TV Field Production <sup>1</sup>	3
COMM 454	Live Broadcast Production <sup>1</sup>	3

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**Important Curriculum Guide Notes**

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

STRATEGIC COMMUNICATION &amp; MEDIA - BS (2119)

Concentration in Digital Media Production (DIGM)

This program is effective as of Summer 2022

Revised 12.05.2022

UCC 03.01.2022

**RECOMMENDED FOUR-YEAR PLAN**

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
COMM 110	Communication Concepts	3
COMM 263	Mass Media and Society	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>

**Spring**

COMM 235	Introduction to Digital Design	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>

**Second Year****Fall**

COMM 248	Interactive Multimedia 1	3
COMM 254	Video Production	3
SCI 101	Science of Life	3
Social Science Inquiry (p. 29)		3
Elective		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>

**Spring**

COMM 256	Message Preparation	3
SCI 102	Understanding the Physical World	3
Digital Media Emphasis Course		3
Thematic Thread Requirement (p. 29)		3
Electives		3
<b>Hours</b>		<b>15</b>

**Third Year****Fall**

COMM 310	Communication Research Methods	3
Digital Media Emphasis Course		3
Thematic Thread Requirement (p. 29)		3
Electives		6
<b>Hours</b>		<b>15</b>

**Spring**

Digital Media Emphasis Course		3
Thematic Thread Requirement (p. 29)		3
Digital Media Elective		3
Electives		6
<b>Hours</b>		<b>15</b>

**Fourth Year****Fall**

COMM 410	Communication Law	3
Digital Media Emphasis Course		3
Thematic Thread Requirement (p. 29)		3
Electives		6
<b>Hours</b>		<b>15</b>

**Spring**

COMM 497	Senior Capstone Seminar	3
COMM 450	Internship	3
COMM 453 or COMM 454	Media Project Management or Live Broadcast Production	3
Digital Media Elective		3

Electives	3
<b>Hours</b>	<b>15</b>
<b>Total Hours**</b>	<b>121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

Major Code: 2119

Concentration Code: DIGM

Revised: 10-2019

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

## Strategic Communication and Media, Bachelor of Science (BS) - Concentration in Health Communication

Health is a top concern for local, national, and global populations and the healthcare industry is growing. Slippery Rock University's Health Communication degree gives students the opportunity to place themselves at the forefront of health communication. Earning a Bachelor's in Health Communication demonstrates not only that graduates understand the nature and complexity of the healthcare industry, but also that they possess the hands-on skills necessary to communicate effectively within this industry.

## WHY CHOOSE HEALTH COMMUNICATION?

One of the few Health Communication programs in the Greater Pittsburgh Region, students graduate not only with a firm understanding of the ever-growing healthcare industry, but also the skills and training necessary to prepare, craft, and deliver effective messages within the healthcare context. Career options include digital and social media content generation, public relations and integrated marketing, advertising, and more.

While majoring in Health Communication, you will have the opportunity to participate in a host of relevant student organizations and complete internships. Upon graduation, students have a portfolio of work that demonstrates a wide range of skills that are relevant to the healthcare industry, including but not limited to: social and digital media content creation, publication production, and research and analytics.

## WHAT WILL YOU LEARN?

Working with professors with experience in their fields, the Health Communication Degree provides you with coursework centered on the health industry, as well as applied coursework in public relations, marketing, and advertising. When you choose to major in Health Communication, you benefit from a cutting-edge and modern interdisciplinary program with provides you with the skills and abilities

necessary for a fruitful career as a communication professional in the healthcare industry.

## CAREERS IN HEALTH COMMUNICATION

It is expected that the healthcare industry will continue to grow. As such, a major benefit of majoring in Health Communication is the plethora of opportunities available to you after graduating. The program's internship opportunities, in combination with the Department of Strategic Communication and Media's vast alumni network make the Health Communication program at SRU a great choice for students as they consider their future careers.

## CLUBS & ORGANIZATIONS

Rock PRSSA

Lambda Pi Eta

## PROGRAM LEARNING OUTCOMES

### STRATEGIC COMMUNICATION AND MEDIA - HEALTH COMMUNICATION, BS

- **Writing:** Produce written health communication tactics to communicate with various publics.
- **Tailored Strategy:** Employ social media, multimedia, and graphic design technologies to communicate health-focused content to designated audiences.
- **Campaign Development:** Demonstrate the ability to develop a data-driven strategic health communication plan tailored to a specific target public.

### STRATEGIC COMMUNICATION AND MEDIA DEPARTMENT, OVERALL

- **Writing competency:** Students will demonstrate the ability to write and present messages clearly and effectively.
- **Ethics and legal issues:** Students will understand ethical and legal issues facing communicators in the 21st century.
- **Research and analysis:** Students will demonstrate the ability to design and implement research studies and critically analyze research data.

## RELATED LINKS

Strategic Communication and Media: Health Communication, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/communication-health-communication/>)

Strategic Communication and Media Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/departments/strategic-communication-and-media/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

## SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	51
	Electives	27

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	

**Total Hours** **0-3**

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	

**Total Hours** **0-3**

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## MAJOR/CONCENTRATION REQUIREMENTS

- 26 major credits must be taken at SRU or PASSHE
- 26 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Core Requirements</b>		
COMM 110	Communication Concepts <sup>1,2</sup>	3
COMM 263	Mass Media and Society <sup>1</sup>	3
COMM 310	Communication Research Methods <sup>1,2</sup>	3
COMM 410	Communication Law <sup>1,2</sup>	3
COMM 497	Senior Capstone Seminar <sup>1,2</sup>	3
Subtotal		15
<b>Health Communication Requirements</b>		
COMM 231	Principles of Integrated Marketing Communication & Public Relations	3
COMM 242 or COMM 256	Media Writing Message Preparation	3
COMM 270	Strategic Health Communication	3
HCAM 230	US Healthcare Systems	3
HCAM 300	Healthcare Systems: Global Perspectives and Analysis	3
COMM 303 or HCAM 275 or PHIL 325	Communication and Media Ethics Health Care Legal & Ethical Foundations Medical/Health Care Ethics	3
COMM 333	Writing for Public Relations and Integrated Marketing Communication	3
COMM 370	Health Communication Cases and Strategies	3
COMM 431	PR and IMC Campaigns Capstone	3
COMM 450	Internship	3

Subtotal 30

## Electives

Select 6 credits from the following (at least one upper-division course is required): 6

COMM 228	Principles of Creative Advertising
COMM 235	Introduction to Digital Design
COMM 248	Interactive Multimedia 1
COMM 307	Social Media
COMM 315	Organizational Communication
COMM 336	Media Relations and Crisis Communication
COMM 364	Strategic Brand Communication
COMM 407	Social Media Network Analytics
COMM 415	Persuasion
ENGL 327	Healthcare Writing
HCAM 335	Current Topics in Health Care
HLTH 311	International Health
MRKT 230	Principles of Marketing

Subtotal 6

**Total Hours** **51**

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> A grade of 'C' or higher must be earned in these courses

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

STRATEGIC COMMUNICATION & MEDIA- BS (2119)

Concentration in Health Communication (HECO)

This program is effective as of Summer 2022

Revised 04.15.2022

UCC 3.1.22

## RECOMMENDED FOUR-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
COMM 263	Mass Media and Society	3
ENGL 102	Critical Writing	3
ESAP 101	FIRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Creative & Aesthetic Inquiry (p. 29)		3
Social Science Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>



**Spring**

COMM 200	Civil Discourse: Theory & Practice	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
COMM 231	Principles of Integrated Marketing Communication & Public Relations	3
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>

**Second Year****Fall**

COMM 242 or COMM 256	Media Writing or Message Preparation	3
HCAM 230	US Healthcare Systems	3
SCI 101	Science of Life	3
Elective		3
Social Science Inquiry (p. 29)		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>

**Spring**

COMM 270	Strategic Health Communication	3
SCI 102	Understanding the Physical World	3
Health Communication Elective		3
Thematic Thread Requirement (p. 29)		3
Elective		3
<b>Hours</b>		<b>15</b>

**Third Year****Fall**

COMM 310	Communication Research Methods	3
HCAM 300	Healthcare Systems: Global Perspectives and Analysis	3
Health Communication Elective		3
Thematic Thread Requirement (p. 29)		3
Elective		3
<b>Hours</b>		<b>15</b>

**Spring**

COMM 333	Writing for Public Relations and Integrated Marketing Communication	3
COMM 303 or HCAM 275	Communication and Media Ethics or Health Care Legal & Ethical Foundations	3
Thematic Thread Requirement (p. 29)		3
Electives		6
<b>Hours</b>		<b>15</b>

**Fourth Year****Fall**

COMM 370	Health Communication Cases and Strategies	3
COMM 333	Writing for Public Relations and Integrated Marketing Communication	3
Thematic Thread Requirement (p. 29)		3
Electives		6
<b>Hours</b>		<b>15</b>

**Spring**

COMM 410	Communication Law	3
COMM 431	PR and IMC Campaigns Capstone	3
COMM 450	Internship	3
COMM 497	Senior Capstone Seminar	3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 2119

Concentration Code: HECO

Revised: 05.03.2022

## Strategic Communication and Media, Bachelor of Science (BS) - Concentration in Integrated Marketing Communication

### PROGRAM LEARNING OUTCOMES

#### Strategic COMMUNICATION and Media - INTEGRATED MARKETING COMMUNICATION, BS

- **Targeted Materials:** Produce appropriately targeted media materials in a variety of formats.
- **Understand the Roles of Marketing Tools:** Understand the role of public relations, advertising, and other promotional marketing tools in the integrated marketing communication mix.
- **Strategic Campaigns:** Demonstrate the ability to develop a research-based strategic integrated marketing communication plan tailored to a designated consumer profile.

### STRATEGIC COMMUNICATION AND MEDIA DEPARTMENT, OVERALL

- **Writing competency:** Students will demonstrate the ability to write and present messages clearly and effectively.
- **Ethics and legal issues:** Students will understand ethical and legal issues facing communicators in the 21st century.
- **Research and analysis:** Students will demonstrate the ability to design and implement research studies and critically analyze research data.

## RELATED LINKS

Strategic Communication and Media - Integrated Marketing Communication, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/communication-integrated-marketing/>)

Strategic Communication and Media Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/departments/communication/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### SUMMARY\*

Code	Title	Hours
Rock Studies 2 Requirements		42
Other Basic Requirements		0-3
Computer Competency		0-3
Major/Concentration Requirements		57
Electives		21

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		

Select 12 Credits (p. 29) <sup>2</sup>	12
<b>Total Hours</b>	<b>42</b>

- 1 Course offered in multiple subjects; cannot take course in first major subject.
- 2 One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

### MAJOR/CONCENTRATION REQUIREMENTS

- 29 major credits must be taken at SRU or PASSHE
- 29 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Core Requirements</b>		
COMM 110	Communication Concepts <sup>1,2</sup>	3
COMM 263	Mass Media and Society <sup>1</sup>	3
COMM 310	Communication Research Methods <sup>1,2</sup>	3
COMM 410	Communication Law <sup>1,2</sup>	3
COMM 497	Senior Capstone Seminar <sup>1,2</sup>	3
Subtotal		15
<b>IMC Requirements</b>		

COMM 231	Principles of Integrated Marketing Communication & Public Relations <sup>1</sup>	3
COMM 256	Message Preparation <sup>1</sup>	3
COMM 307	Social Media	3
COMM 332	Case Studies in Public Relations and Integrated Communication <sup>1</sup>	3
COMM 333	Writing for Public Relations and Integrated Marketing Communication <sup>1,2</sup>	3
MRKT 230	Principles of Marketing	3
MRKT 333	Consumer Behavior <sup>1</sup>	3
MRKT 334	Advertising Management <sup>1</sup>	3
COMM 364	Strategic Brand Communication <sup>1</sup>	3
COMM 407	Social Media Network Analytics <sup>1</sup>	3
COMM 431	PR and IMC Campaigns Capstone <sup>1</sup>	3
Subtotal		33
<b>Electives</b>		
Select six credits from the following:		6
COMM 228	Principles of Creative Advertising <sup>1</sup>	
COMM 235	Introduction to Digital Design <sup>1</sup>	
COMM 248	Interactive Multimedia <sup>1</sup>	
COMM 254	Video Production <sup>1</sup>	
COMM 334	Publication Production <sup>1</sup>	
MRKT 338	E-Commerce <sup>1</sup>	
COMM 347	New-Media Journalism <sup>1</sup>	
COMM 405	Global Media <sup>1</sup>	
COMM 434	Advertising Production <sup>1</sup>	
COMM 459	Issues in Communication Technologies <sup>1</sup>	
Subtotal		6
<b>Internship</b>		
COMM 450	Internship <sup>1</sup>	3
or MRKT 450	Internship	
<b>Total Hours</b>		<b>57</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> A grade of 'C' or higher must be earned in these courses

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

STRATEGIC COMMUNICATION & MEDIA- BS (2119)

Concentration in Integrated Marketing (IMRK)

This program is effective as of Fall 2022

Revised 04.15.2022.

UCC 3.1.22

## RECOMMENDED FOUR-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
COMM 110	Communication Concepts	3
COMM 263	Mass Media and Society	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Creative and Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
COMM 200	Civil Discourse: Theory & Practice	3
ENGL 104	Critical Reading	3
COMM 231	Principles of Integrated Marketing Communication & Public Relations	3
MATH 117	Quantitative Reasoning	3
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
COMM 256	Message Preparation	3
SCI 101	Science of Life	3
or SCI 102	or Understanding the Physical World	
IMC Elective		3
Social Science Inquiry (p. 29)		3
Elective		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
MRKT 230	Principles of Marketing	3
SCI 101	Science of Life	3
or SCI 102	or Understanding the Physical World	
IMC Elective		3
Thematic Thread Requirement (p. 29)		3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
COMM 307	Social Media	3
COMM 310	Communication Research Methods	3
COMM 332	Case Studies in Public Relations and Integrated Communication	3
Thematic Thread Requirement (p. 29)		3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
COMM 333	Writing for Public Relations and Integrated Marketing Communication	3
MRKT 333	Consumer Behavior	3
Thematic Thread Requirement (p. 29)		3

Electives	6
<b>Hours</b>	<b>15</b>
<b>Fourth Year</b>	
<b>Fall</b>	
COMM 364	Strategic Brand Communication 3
COMM 410	Communication Law 3
MRKT 334	Advertising Management 3
Thematic Thread Requirement (p. 29)	3
Elective	3
<b>Hours</b>	<b>15</b>
<b>Spring</b>	
COMM 407	Social Media Network Analytics 3
COMM 431	PR and IMC Campaigns Capstone 3
COMM 450	Internship 3
COMM 497	Senior Capstone Seminar 3
Elective	3
<b>Hours</b>	<b>15</b>
<b>Total Hours**</b>	<b>121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 2119

Concentration Code: IMRK

Revised: 05.03.2022

## Strategic Communication and Media, Bachelor of Science (BS) - Concentration in Public Relations

### PROGRAM LEARNING OUTCOMES

#### Strategic COMMUNICATION and Media - PUBLIC RELATIONS, BS

- **Writing:** Produce written communication tactics to communicate with various publics.
- **Tactics:** Employ social media, multimedia, and graphic design technologies to communicate with publics.
- **Strategic Campaigns:** Demonstrate the ability to develop a research-based strategic communication plan tailored to a specific target public.

#### STRATEGIC COMMUNICATION AND MEDIA DEPARTMENT, OVERALL

- **Writing competency:** Students will demonstrate the ability to write and present messages clearly and effectively.

• **Ethics and legal issues:** Students will understand ethical and legal issues facing communicators in the 21st century.

• **Research and analysis:** Students will demonstrate the ability to design and implement research studies and critically analyze research data.

## RELATED LINKS

Strategic Communication and Media - Public Relations, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/communication-public-relations/>)

Strategic Communication and Media Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/departments/communication/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	54
	Electives	24

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

#### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3

<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> From at least 3 Categories; no more than 6 credits from one department; 6 credits must be 300-level or above.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## MAJOR/CONCENTRATION REQUIREMENTS

- 27 major credits must be taken at SRU or PASSHE
- 27 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Communication Core</b>		
COMM 110	Communication Concepts <sup>1,2</sup>	3
COMM 263	Mass Media and Society <sup>1</sup>	3
COMM 310	Communication Research Methods <sup>1,2</sup>	3
COMM 410	Communication Law <sup>1,2</sup>	3
COMM 497	Senior Capstone Seminar <sup>1</sup>	3
Subtotal		15
<b>Public Relations Requirements</b>		

COMM 231	Principles of Integrated Marketing Communication & Public Relations <sup>1</sup>	3
COMM 242	Media Writing <sup>1,2</sup>	3
COMM 307	Social Media <sup>1</sup>	3
COMM 317	Topics in Global and Intercultural Communication	3
COMM 332	Case Studies in Public Relations and Integrated Communication <sup>1</sup>	3
COMM 333	Writing for Public Relations and Integrated Marketing Communication <sup>1,2</sup>	3
COMM 431	PR and IMC Campaigns Capstone <sup>1</sup>	3
COMM 450	Internship <sup>1</sup>	3-12
Subtotal		24-33

### Message Production Tactics

Select three courses of the following (at least one course must be 300 level or higher) 9

COMM 235	Introduction to Digital Design <sup>1</sup>
COMM 247	Photojournalism <sup>1</sup>
COMM 248	Interactive Multimedia 1 <sup>1</sup>
COMM 254	Video Production <sup>1</sup>
COMM 256	Message Preparation <sup>1</sup>
COMM 258	Interactive Multimedia 2 <sup>1</sup>
COMM 334	Publication Production <sup>1</sup>
COMM 347	New-Media Journalism <sup>1</sup>
COMM 359	Interactive Multimedia 3
COMM 401	Digital Imaging
COMM 434	Advertising Production

### PR Professional Practice

Select two of the following (at least one course must be at 300 level or higher) 6

COMM 228	Principles of Creative Advertising
COMM 270	Strategic Health Communication
COMM 312	Argumentation
COMM 315	Organizational Communication
COMM 318	Professional Presentation
COMM 336	Media Relations and Crisis Communication
COMM 370	Health Communication Cases and Strategies
COMM 407	Social Media Network Analytics
COMM 415	Persuasion
HEMT 112	Introduction to HEMT
HEMT 210	Contemporary Travel and Tourism
MRKT 230	Principles of Marketing
MGMT 351	Organizational Behavior
MGMT 354	Human Resources Management
PCRM 204	Environmental Communication
or COMM 204	Environmental Communication
PCRM 347	Interpretive Methods and Programming
SPMT 194	Introduction to Sport Management
SPMT 301	The Fan Experience

**Total Hours 54**



- <sup>1</sup> Course counts for 50% of Major and Major GPA
- <sup>2</sup> A grade of 'C' or higher must be earned in these courses
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

STRATEGIC COMMUNICATION & MEDIA- BS (2119)

Concentration in Public Relations (PUBR)

This program is effective as of Summer 2022

Revision date: 04.15.2022

UCC RISP 3.1.22

## RECOMMENDED FOUR-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
COMM 110	Communication Concepts	3
COMM 263	Mass Media and Society	3
	Creative and Aesthetic Inquiry (p. 29)	3
ESAP 101	FYRST Seminar *	1
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
COMM 200	Civil Discourse: Theory & Practice	3
ENGL 104	Critical Reading	3
COMM 231	Principles of Integrated Marketing Communication & Public Relations	3
MATH 117	Quantitative Reasoning	3
	Humanities Inquiry (p. 29)	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
COMM 235	Introduction to Digital Design	3
	Message Production & Tactics Course	3
	Natural Sciences Inquiry (p. 29)	3
	Social Science Inquiry (p. 29)	3
	Elective	3
	Declare a Thematic Thread <sup>2</sup>	
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
COMM 242	Media Writing	3
	Message Production & Tactics Course	3

Physical Sciences Inquiry (p. 29)	3
Thematic Thread Requirement (p. 29)	3
Elective	3
<b>Hours</b>	<b>15</b>

### Third Year

#### Fall

COMM 310	Communication Research Methods	3
COMM 332	Case Studies in Public Relations and Integrated Communication	3
	Thematic Thread Requirement (p. 29)	3
	Elective	3
	Message Production & Tactics Course	3

**Hours 15**

#### Spring

COMM 307	Social Media	3
COMM 333	Writing for Public Relations and Integrated Marketing Communication	3
	Thematic Thread Requirement (p. 29)	3
	PR Professional Practice Course	3
	Elective	3

**Hours 15**

### Fourth Year

#### Fall

COMM 410	Communication Law	3
COMM 312 or COMM 415	Argumentation or Persuasion	3
	PR Professional Practice Course	3
	Thematic Thread Requirement (p. 29)	3
	Elective	3

**Hours 15**

#### Spring

COMM 317	Topics in Global and Intercultural Communication	3
COMM 497	Senior Capstone Seminar	3
COMM 431	PR and IMC Campaigns Capstone	3
	Elective	3
COMM 450	Internship	3

**Hours 15**

**Total Hours\*\* 121**

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

Major Code: 2119

Concentration Code: PUBR

Revised: 05.03.2022

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to**

registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Strategic Communication and Media, Minor

The Minor in Strategic Communication and Media gives students access to courses in communication theory, strategic communication, and media production. It is the perfect complement to other Slippery Rock University programs of study. Students majoring in sports management, park and resource management, and business are just some of those who find a second home in the Department of Strategic Communication and Media.

To access Minor Requirements, please view the Curriculum Guide tab.

## RELATED LINKS

Strategic Communication and Media, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/communication-studies/>)

Strategic Communication and Media Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/departments/communication/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Minor GPA: 2.0 or higher

### MINOR REQUIREMENTS

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Communication Courses</b>		
COMM 110	Communication Concepts <sup>1</sup>	3
<b>Required Communication Diversity Course</b>		
Select one of the following:		3
COMM 217	Intercultural Communication	
COMM 405	Global Media	
<b>Required Research Course</b>		
Select one of the following:		3
COMM 310	Communication Research Methods <sup>1</sup>	
HIST 205	The Historian's Craft	
HLTH 406	Program Planning and Evaluation	
MRKT 430	Marketing Research	
POLS 310	Research Methods	
PSYC 232	Psychological Science II: Statistical Applications	
SEFE 370	Educational Measurements, Assessment and Evaluation	
SOWK 318	Research Methods	
SPMT 499	Sport Management Research Methods	

### Electives

Communication Elective (300 or 400 level)	3
Communication Elective (any level)	3
Communication Elective (any level)	3
<b>Total Hours</b>	<b>18</b>

<sup>1</sup> Must have a "C" or better in this course.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN STRATEGIC COMMUNICATION & MEDIA (13C)

This program is effective as of Summer 2022

Revised 04.15.2022

UCC: 3.1.22

## College of Education

### Dean's Office Staff

#### Dr. Keith Dils

Dean, College of Education

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#### Dr. James Preston

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## Departments

- Counseling & Development (p. 153)
- Elementary Education/Early Childhood Education (p. 155)

- Physical and Health Education (p. 172)
- Secondary Education/Foundations of Education (p. 211)
- Special Education (p. 243)

## Teacher Education Information

The following link takes you to the Four Phases of Teacher Education (<https://www.sru.edu/academics/colleges-and-departments/coe/four-phases-of-teacher-education/>) page, which provides procedures and requirements for such things as Admissions to Candidacy (including testing, GPA, and clearance requirements), Application for Field Experiences and Student Teaching, and application for PA Teacher Certification.

## Counseling & Development

Chair	Secretary	Location	Department Phone
Dr. Molly Mistretta	Annamarie Phillips	114 Carruth-Rizza Hall	724-738-2035

Department Web Site URL (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/counseling-and-development/>)

## The Rock Difference

The Department of Counseling and Development trains practitioners to deliver quality services to clients and students and to be reflective, ethical and competent in serving their diverse community. Department programs include Clinical Mental Health Counseling, Student Affairs in Higher Education, College Counseling and School Counseling. Our students are prepared according to professionally accepted standards and, where appropriate, for licensure / certification in their field of study.

The Student Counseling Center is also part of the Department of Counseling and Development. For information regarding the Student Counseling Center see the Student Counseling Center link.

## Faculty

### Christopher Cubero

Associate Professor  
Counseling & Development  
Ph.D., East Carolina University  
M.S., East Carolina University  
B.S., Penn State University

### Jennifer Culver

Assistant Professor  
Counseling & Development  
Ph.D., University of Missouri  
M.A., Indiana Wesleyan University  
B.A., The College of Wooster

### Rachel DeMaria

Instructor  
Counseling & Development

### Natalie Drozda

Assistant Professor  
Counseling & Development  
Ph.D., Duquesne University  
M.A., Slippery Rock University

B.A., University of Illinois

### Alison DuBois

Instructor  
Counseling & Development  
Ph.D., Duquesne University  
M.E.D., Westminster College  
B.A., John Carroll University

### Jane Hale

Associate Professor  
Counseling & Development  
Ph.D., Duquesne University  
M.S., Youngstown State University  
B.A., Westminster College

### Hannah Hepler

Assistant Professor  
Counseling & Development

### Kelli Lampe

Assistant Professor  
Counseling & Development  
M.Ed., Duquesne University  
B.A., Duquesne University

### John Mathe

Assistant Professor  
Counseling & Development  
Ph.D., Duquesne University  
M.A., Slippery Rock University  
B.S., Robert Morris University

### Kenneth Messina

Associate Professor  
Counseling & Development  
Ph.D., Duquesne University  
M.A., Slippery Rock University of PA  
B.A., Waynesburg College

### Molly Mistretta

Assistant Professor  
Counseling & Development  
Ph.D., University of Pittsburgh  
M.S., Indiana University  
B.A., Westminster College

### Glenda Musoba

Instructor  
Counseling & Development

### Melissa Nard-Mitchell

Associate Professor  
Counseling & Development  
D.Psy., Nova Southeastern University  
M.S., Nova Southeastern University  
B.A., Washington and Jefferson College

### Melissa Rychener

Instructor  
Counseling & Development

### Jodi Sindlinger

Assistant Professor  
Counseling & Development

Ph.D., Duquesne University  
 M.A., Slippery Rock University of PA  
 B.A., Pennsylvania State University

## Courses

### **CDEV 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

### **CDEV 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

### **CDEV 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

### **CDEV 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

### **CDEV 201 - Interpersonal and Group Dynamics**

Interpersonal behavior in small groups, with attention to group structure, individual factors, communication, and techniques. Treatment of leadership, group pressures, the effect of the group on personality, and group aims.

Credits: 3

Term(s) Typically Offered: Offered as Needed

### **CDEV 248 - Human Development and Education**

A study of the various stages of physical, intellectual, and emotional development, from pre-school age through adolescence, with reference to the effects upon the learning and educational process.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course

### **CDEV 249 - Child Development**

A study of the various stages of development from conception to adolescence. Attention is directed to the physical, emotional, intellectual and social development of the child.

Credits: 3

Term(s) Typically Offered: Offered as Needed

### **CDEV 250 - Adolescent Psychology**

A study of the physical, mental and emotional development during the changes from childhood and the influence on attitudes and behavior of the age group in relation to the theories. Psychological principles are applied to the problems of family, community and school adjustment, as well as to the development of the persons.

Credits: 3

Term(s) Typically Offered: Offered as Needed

### **CDEV 251 - Mental Health in America**

What is mental health? How does American society view mental illness? What systems are there to support people who struggle with mental health concerns? Do these systems work? How and why does someone get diagnosed? This course will explore all these questions and more as students will explore mental health in the context of American society past and present with implications for the future. Current issues and trends in mental health and wellness will be explored including the current mental health system in America, advocacy for mental health issues and treatment, stigma in society related to mental health, how issues of diversity impact mental health and treatment, and how the topic of mental health impacts individuals and society.

Credits: 3

Thematic Thread(s): Citizenship & Social Problems, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

### **CDEV 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

### **CDEV 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

### **CDEV 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CDEV 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CDEV 395 - Undergraduate Workshops**

Special topics of interest to undergraduates and selected community members. A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CDEV 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CDEV 490 - Independent Study**

A program of independent work conducted by a student who has demonstrated academic proficiency. Prerequisite: Permission of the instructor, advisor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CDEV 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CDEV 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Elementary Education/Early Childhood Education

Chair	Secretary	Location	Department Phone
Dr. Michelle Amodei	Debbie Reep	104 McKay Education Building	724-738-2042

Department Web Site URL (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/elementary-education/-early-childhood/>)

Department Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/eled-fs.pdf>)

## The Rock Difference

The Department of Elementary/Early Childhood Education's mission statement is aligned with and reflective of the College mission, but is designed to specify the particular goals of the program. The goal of the Elementary Education/Early Childhood Department is to equip our graduates to meet the professional challenges of classrooms and school communities for the 21st century.

The Department of Elementary Education/Early Childhood offers an undergraduate certification program in Early Childhood Education (PK-4). Prospective early childhood teachers take balanced course work that provides a broad educational experience. Included are rock studies courses as well as both professional and elementary/ early childhood education courses. Students (in this certification area) are required to complete field observation hours within course context with young children in a diverse setting. This early experience is followed by numerous field experiences in early childhood and elementary classrooms at the sophomore and junior year as well as student teaching during the senior year. Students are offered the opportunity to complete part of their student teaching in an international or urban setting. The primary objective of the elementary/early childhood education program is to develop competent, caring and effective state-of-the-art teachers, prepared to teach each child to high standards.

## Multiple Certification Programs

While not required, it is strongly recommended that students complete a second area of certification, a minor, or an area of concentration in addition to elementary education. Our students have completed additional certifications in early childhood education, special education, environmental education and modern languages. Students have also minored in many areas including dance, history, math and Spanish. Students seeking multiple certifications should declare their intent as early as possible in their academic career and recognize that this may require additional credits beyond those required for the baccalaureate degree. Students seeking multiple certifications may expect to complete student teaching experiences in each of the certification areas. We also offer a Letter of Completion for teaching online and an international concentration. Specific requirements for additional certification, minors, and areas of concentration are available from advisers and the Department of Elementary Education/Early Childhood office, room 104 McKay Education Building. Students are encouraged to work closely with their academic adviser in choosing and declaring these other options.



## Post-Baccalaureate Programs

Persons possessing a bachelor's degree may apply for admission to the post-baccalaureate program leading to early childhood education certification. This program is designed for those who have completed degree requirements in a non-education major or who desire a second certification after graduation.

The post-baccalaureate program includes up to 80 credits of coursework for non-licensed applications, with an accelerated program for middle-level or special education certified applicants and a required practicum. The practicum must be completed in an elementary/early childhood classroom under the supervision of a university faculty member, even if the student is certified in another area.

## Faculty

### Monique Alexander

Associate Professor  
Elementary Ed/Early Childhood  
Ph.D., Pennsylvania State University  
M.Ed., Teacher's College of Columbia University  
B.A., Bucknell University

### Michelle Amodei

Associate Professor  
Elementary Ed/Early Childhood  
Ed.D., Indiana University of Pennsylvania  
M.S., Duquesne University  
B.S., Indiana University of Pennsylvania

### Grace Bennett

Instructor  
Elementary Ed/Early Childhood

### Richard Cavett

Instructor  
Elementary Ed/Early Childhood

### Nicole Fuchs

Instructor  
Elementary Ed/Early Childhood  
M.A., University of Pittsburgh  
B.S., University of Pittsburgh

### Rose Heilman-Houser

Associate Professor  
Elementary Ed/Early Childhood  
Ed.D., Indiana University of Pennsylvania  
M.A., Indiana University of Pennsylvania  
B.A., Indiana University of Pennsylvania

### Sara Isacco

Instructor  
Elementary Ed/Early Childhood  
M.Ed., Slippery Rock University  
B.S., Slippery Rock University

### Laura Kelley

Associate Professor  
Elementary Ed/Early Childhood  
M.A., Marian University  
B.A., DePauw University

### Elizabeth LaGamba

Assistant Professor  
Elementary Ed/Early Childhood  
Ed.D., University of Pittsburgh  
M.Ed., Slippery Rock University  
B.A., John Carroll University

### Emily Mazzant

Instructor  
Elementary Ed/Early Childhood

### Enoh Nkana

Assistant Professor  
Elementary Ed/Early Childhood  
Ph.D., Andrews University  
M.Ed., Southern Adventist University  
B.A., Southern Adventist University

### Amy Orville

Instructor  
Elementary Ed/Early Childhood

### Diane Papa

Instructor  
Elementary Ed/Early Childhood  
B.S., Slippery Rock University

### James Preston

Associate Professor  
Elementary Ed/Early Childhood  
Ed.D., Indiana University of Pennsylvania  
M.Ed., Indiana University of Pennsylvania  
B.Ed., Indiana University of Pennsylvania

### Robert Snyder

Professor  
Elementary Ed/Early Childhood  
Ph.D., University of Pittsburgh  
M.Ed., Slippery Rock University  
B.S., Slippery Rock University

### Laura Strong

Instructor  
Elementary Ed/Early Childhood  
D.Ed., Indiana University  
M.A., Indiana University  
B.A., Cameron University

### Sara Tours

Associate Professor  
Elementary Ed/Early Childhood  
Ph.D., Florida State University  
M.S., Florida State University  
B.S., Florida State University

### Mary Walsh

Associate Professor  
Elementary Ed/Early Childhood  
B.A., Mercyhurst College  
M.S. Youngstown State University  
Ph.D., Kent State University

### Deborah Wells

Professor  
Elementary Ed/Early Childhood

Ph.D., Arizona State University  
 M.Ed., Auburn University  
 B.S., Auburn University  
 B.A., Auburn University

### **Hye Ryung Won**

Assistant Professor  
 Elementary Ed/Early Childhood  
 Ph.D., Florida State University  
 M.Ed., The University of Texas at Austin  
 M.Ed., Chung-Ang University  
 B.Ed., Korea National Open University

### **Linda Zane**

Professor  
 Elementary Ed/Early Childhood  
 Ed.D., Duquesne University  
 M.A., University of Pittsburgh  
 B.S., University of Pittsburgh

## **Programs**

### **Majors**

- Early Childhood Education (PK-4), Bachelor of Science in Education (BSED) (p. 164)
- Early Childhood Education (PK-4), Bachelor of Science in Education (BSED) - Concentration in International Education (p. 168)
- Early Childhood Education (PK-4)/Special Education (PK-12), Bachelor of Science in Education (BSED) (p. 249)
- Early Childhood Education (PK-4)/Special Education (PK-12), Bachelor of Science in Education (BSED) - Concentration in International Education (p. 252)

### **Minors**

- Global Education, Minor (p. 171)

## **Courses**

### **ELEC 100 - Early Childhood Education Theory & Practice**

This course is designed to introduce students to early childhood education with emphasis on historical and contemporary perspectives, theories, practice and current trends and developments. Early childhood environments for children from birth through nine years of age will be studied and various curricula materials will be reviewed. Examination of the student's personal qualities in relationship to expectations of the field is addressed throughout the course (COE assessment of dispositions). Students will be exposed to children within a variety of early childhood settings via videotaped observations of children and classrooms.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Transfer Thread Completion Course

### **ELEC 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

### **ELEC 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

### **ELEC 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

### **ELEC 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

### **ELEC 200 - Child Development Typical**

This course will provide a critical overview of key aspects of child development (physical, psychosocial, and cognitive) from theories and research that span conception to the early school years (birth to age 9). Important contexts that shape children's development will also be a major focus of this course, such as family, school, community, socioeconomic, and policy influences.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Transfer Thread Completion Course

**ELEC 230 - Field-Based Child Development Typical**

Candidates will connect theory to practice in this course. Both typical and atypical child development will be studied in-depth through observations in a variety of education and education-related settings for children birth through grade four.

Prerequisites: ELEC 100<sup>D</sup> and ELEC 200<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): ELEC 237 and ELEC 281

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1 or Freshman 2 may **not** enroll.

Enrollment limited to students in the College of Education college.

**ELEC 237 - ELL Strategies and Practice for Early Childhood Education**

This course will focus on the development of competencies and skills needed to effectively teach students whose first language is not English so that teacher candidates can accommodate and adapt instruction and assessments for Pre-K through Grade 4 English Language Learners (ELLs). In addition, this course is designed to provide pre-service early childhood educators with the scientific study of psycholinguistic phenomena in the study of language acquisition, to understand development of typical and atypical oral language in young children from birth to age 9, and to understand cultural and familial influences on language and literacy.

Prerequisites: ELEC 100<sup>D</sup> and ELEC 200<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): ELEC 230 and ELEC 281

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1 or Freshman 2 may **not** enroll.

**ELEC 238 - Literacy Practices for the Emergent Learner, PK-1**

Through a blend of theory and practice, this course explores research-based instruction for the emergent literacy learner (PreK-grade 1), including the relationship between language development and literacy, instructional activities to help children become competent users of oral language, reading and writing processes, creation of a literate environment, and cultural and familial influences on language and literacy.

Prerequisites: ELEC 100<sup>D</sup> and ELEC 200<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): ELEC 285

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**ELEC 281 - Family and Community Diversity and Partnerships**

This course is designed to acquaint the teacher candidate in early childhood education to the theories, practices, skills, and knowledge of home, school, and community relationships, building towards home and school partnerships. The focus of this course is developing a thorough understanding of diverse contexts and ethnicities that helps educators of young children strengthen the bonds between home, school and community.

Prerequisites: ELEC 100<sup>D</sup> and ELEC 200<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): ELEC 230 and ELEC 237

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**ELEC 285 - Integrating Creative Expression through the Arts**

This course will identify basic elements, principals, related concepts, and vocabulary of the creative and performing arts. The creative arts exist as vehicles through which we can communicate the very essence of expressive language. Students will be introduced to various media, lesson planning, and ways of integrating the arts into planning academic and multicultural curricula for PreK-4 classrooms. This course will serve as a foundation for integrating arts across the curriculum.

Prerequisites: ELEC 100<sup>D</sup> and ELEC 200<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): ELEC 238

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**ELEC 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ELEC 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**ELEC 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ELEC 301 - Math/Science Teaching Lab**

Provides students with a myriad of opportunities to: identify and develop basic teaching skills, design and implement math and science lessons for peers and school-aged children, and reflect/analyze lessons in light of science and math education research findings. Throughout the course, candidates will have the opportunity to actually experience classroom teaching when possible.

Prerequisites: ELEC 281<sup>D</sup> and (ELEC 288<sup>D</sup> or ELEC 304<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): ELEC 342

Credits: 1

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 306 - Early Childhood Education I**

Research, history, philosophy, current trends and observations with emphasis on the nature and nurture of the young child from birth through third grade.

Prerequisites: ELEC 200 (may be taken concurrently)<sup>D</sup> and ELEC 248<sup>\*D</sup> and CDEV 342 (may be taken concurrently)<sup>D</sup> (may be taken concurrently).  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 308 - Folk Literature and Storytelling**

Combines a study of traditional literature with practice in the best methods of presenting it orally. Oral presentations include a preschool story hour, folk tale, and myth or literary fairy tale. The course also emphasizes the importance of puppetry in education and recreation.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 311 - Mathematics & Literacy Teaching Lab Pre K - 4**

This course provides teacher education candidates with an opportunity to observe, assist, and teach mathematics and literacy lessons in a pre-school or early childhood grade level setting. Through this lab, candidates identify and develop basic teaching skills, design and implement mathematics and literacy lessons for PK-Grade 4 children, and reflect and analyze on lessons taught, based on assessment data, research and philosophies examined concurrently in the mathematics and literacy methods courses. Candidates will also develop an appreciation for the many tasks teachers perform daily.

Corequisite(s): ELEC 316

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 316 - Developmental Formal and Informal Assessments**

A study of assessment for children from birth to Grade 4. Both formal and informal instruments will be discussed with the emphasis on tools that can be used by teachers of young children to inform developmentally appropriate instruction and practices on a daily basis. Considerations in choosing, administering, and reporting results of assessments will also be addressed.

Corequisite(s): ELEC 330

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 317 - Child and Family Development in Early Childhood**

This course is a theoretical, in-depth examination of physical, intellectual, social-emotional, language and family development from birth through age 8, which builds upon previous Human Development courses. Development is viewed as occurring within a family and a culture, not in isolation. Emphasis is placed upon the connections between the theoretical and the practical.

Prerequisites: CDEV 248<sup>D</sup> and ELEC 306<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 320 - Elementary Field Experience**

Candidates enroll as part of the Professional Block in Elementary Education. This course involves an in-depth teaching experience in an elementary classroom in which opportunities are provided for the application of content knowledge, pedagogical skills, and the assessment of children's learning. Grading P/NC/Fail.

Prerequisites: ELEC 301<sup>P</sup> and ELEC 342<sup>D</sup> and ELEC 362<sup>D</sup>  
<sup>P</sup> Requires minimum grade of P.  
<sup>D</sup> Requires minimum grade of D.

Corequisite(s): ELEC 332

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 324 - Methods for Teaching English as a Second Language and Bilingual Education**

A course designed to acquaint the prospective teacher at any level with the methodology used to teach English to native speakers of other languages and to acquaint students with the specialized procedures used when teaching in bilingual classrooms (any two languages) on any level.

Prerequisites: ELEC 200<sup>D</sup> and (CDEV 248<sup>D</sup> or CDEV 342<sup>D</sup>)  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 325 - Children's Literature**

This course introduces the children's literature: the history, the authors and illustrators, and the readers. A major focus is on diversity in books for children and how different cultures, experiences, time periods and characters are represented, or excluded. Emphasis is placed on critical analysis and discussion of books and illustrations, with a focus on elements of literature and art. Children as readers is also a focus, exploring ways that literature is used in classrooms and families.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Early Childhood Ed (PK-4), Early Child/Spec Ed(PK-4)PK-8) or Early Childhood Education.

**ELEC 327 - Social/Cultural Studies in Early Childhood Education**

This course is a multi-dimensional methods course which integrates background knowledge from the social sciences, natural sciences, and the humanities and fine arts. It focuses on an experiential approach to facilitating young children's growth and development, with an emphasis on human relationships. A multi-cultural perspective is fostered.

Prerequisites: (ELEC 306<sup>D</sup> or ELEC 396<sup>D</sup>) and CDEV 248<sup>D</sup> and ELEC 200<sup>D</sup> and SEFE 342<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): ELEC 397

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 328 - Curriculum and Assessment in ESL Education**

This course prepares students seeking Pennsylvania certification in English as a second language (K-12) with key concepts related to curriculum development and assessment for students learning English as a second language. Topics include meeting ESL curriculum standards, novel and accurate assessment procedures, culturally biased testing, assessment suitability criteria, and culturally appropriate testing situations. The course investigates assessment within the context of ESL curriculum design, implementation, and program evaluation. Finally, students will come to terms with the process of evaluating language minority students in relation to diagnosis, placement, formal and informal assessment, exiting, and monitoring of student progress.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 330 - Literacy Practices for the Developing Learner, Grades 2 - 4**

Candidates will acquire a thorough understanding of literacy development (ages 5 - 9) as revealed in learning and motivation theories.

Candidates will be prepared to use a variety of instructional strategies and materials selectively, appropriately, and flexibly. Candidates will be prepared to use multiple strategies for developing students' word/concept knowledge and word analysis skills in addition to understanding how word meaning and fluency support comprehension. Candidates will be able to teach multiple comprehension strategies that support readers in constructing meaning from text, both literary and informational, and in monitoring their comprehension. Candidates will gain strategies for infusing writing and the conventions of writing into literacy learning. Candidates will acquire appropriate assessment techniques to support responsive instructional decision making and reflection. Competencies and skills needed to effectively support students whose first language is not English will be central to this course.

Corequisite(s): ELEC 340

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 332 - The Teaching of Elementary Reading**

Candidates will be introduced, through theory and practice, to a variety of strategies for teaching elementary reading. Candidates will become aware of ways to assess reading progress and ways to support children as they develop as readers. Candidates will also become familiar with materials used in the classroom to support literacy.

Prerequisites: ELEC 301<sup>P</sup> and ELEC 342<sup>D</sup> and ELEC 362<sup>D</sup>

<sup>P</sup> Requires minimum grade of P.

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): ELEC 320

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 340 - Mathematics Methods and Strategies for PRE K - 4 Teachers**

This course is designed to provide pre-service teachers with the pedagogy and materials necessary for teaching early childhood mathematics. This course addresses development and instruction in play-based and problem-based mathematics in pre-K to grade 4 settings.

Included are methods, materials, and research findings related to teaching of mathematics. Questions that provide the structure for this course are: What is the nature of mathematics (what is mathematics and what does it mean to do mathematics)? How do children learn mathematics? How do we as teachers help children learn mathematics?

Corequisite(s): SPED 350

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

Enrollment limited to students in the College of Education college.

**ELEC 342 - The Teaching of Elementary Mathematics**

The various processes and operations needed to effectively teach mathematics in the elementary school are carefully analyzed. Candidates recognize and can address the mathematical concepts and the potential misconceptions and misunderstandings of these concepts by school-aged children.

Prerequisites: MATH 210<sup>D</sup> and MATH 310<sup>D</sup> and SEFE 270 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): ELEC 362

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.



**ELEC 347 - Modern Primary Programs**

A survey of philosophy, techniques and methodology used in educating children through continuous progress in an ungraded primary school.

Prerequisites: ELEC 306<sup>D</sup> or ELEC 396<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 348 - Leadership, Advocacy & Program Development**

This course will focus on leadership, advocacy and program development for teacher candidates preparing to work with children Pre-K to Grade 4. Focus will be on the design, development, and evaluation of early childhood programs, including theory, paradigms and models, policy in the program development process, and the use of technology in program development. In addition, this course will include theory, research and practice in early childhood as a foundation for leadership in the field and advocacy on behalf of young children, families, communities, and the early childhood profession. An examination of current issues in the field and strategies for articulating positions and for working toward change will also be addressed.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 352 - The Teaching of Language Arts**

Candidates will be introduced, through theory and practice, to a variety of strategies for teaching elementary language arts. They will become familiar with the six components of language arts: reading, writing, speaking, listening, visually representing, and viewing. Candidates will learn strategies for teaching these components and integrating them into the classroom curriculum. Candidates will also become familiar with assessment tools for language arts.

Prerequisites: ELEC 301<sup>P</sup> and ELEC 342<sup>D</sup> and ELEC 362<sup>D</sup>

<sup>P</sup> Requires minimum grade of P.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 362 - The Teaching of Elementary Science**

Candidates will learn numerous strategies which engage students in the science inquiry process by connecting scientific understanding and contemporary teaching and assessment practices. Locating and adapting appropriate activity-based science lessons are important components of this course.

Corequisite(s): ELEC 301

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 372 - The Teaching of Elementary Social Studies**

Candidates in this course will explore the social studies curriculum, including its organization; analyze methods of teaching, objectives, and materials; and discuss evaluation/assessment techniques. Study focuses on best practice classroom applications and the relationship between instruction and student learning outcome. Field experiences included.

Prerequisites: ELEC 301<sup>P</sup> and ELEC 342<sup>D</sup> and ELEC 362<sup>D</sup>

<sup>P</sup> Requires minimum grade of P.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 382 - Literacy Assessment**

A study of literacy assessment techniques designed to support the elementary teacher in designing a supportive literacy environment and effective literacy instruction for all students.

Prerequisites: ELEC 332<sup>D</sup> and SEFE 200<sup>D</sup> and CDEV 248<sup>D</sup> and CDEV 342<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 385 - Creativity**

An interdisciplinary approach to child-centered teaching through creative instructional materials, drama, music, and a variety of art media.

Prerequisites: SEFE 200 (may be taken concurrently)<sup>D</sup> and (SEFE 248 (may be taken concurrently)<sup>D</sup> or CDEV 248<sup>D</sup>) and (SEFE 342 (may be taken concurrently)<sup>D</sup> or CDEV 342<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 397 - Early Childhood Education II**

Curriculum, materials, audio-visual and other aids and their implementation in various early childhood learning situations with full articulation of such programs with the primary grades.

Prerequisites: (ELEC 306<sup>D</sup> or ELEC 396<sup>D</sup>) and CDEV 248<sup>D</sup> and SEFE 342<sup>D</sup> and SEFE 200<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): ELEC 327

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 405 - Overview of and Immersion in Global Education**

The course focuses on global education and an immersive experience in a mediated field experience abroad. Students will develop awareness and skills needed to teach in a culturally responsive classroom. Educational systems from various countries will be explored with a focus on the country of the mediated field experience.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Transfer Thread Completion Course

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ELEC 407 - Math and Science in Early Childhood Learning**

Students will apply theories of child development to the implementation of math and science in the early childhood curriculum. Using a constructivist approach, students will plan and implement activities designed to enhance cognitive development in these areas. Students will become aware of available materials for teaching and assessment.

Prerequisites: (ELEC 327<sup>D</sup> or ELEC 278<sup>D</sup>) and (ELEC 337<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 410 - Culture and Politics of American Education**

Public education (Pre-K-12) in the United States is one of the most important civic debates in our society. Everyone has attended school and everyone seems to have an opinion about what counts as a quality education. The problem of how to provide an education to the youth of this country requires thoughtful decisions-informed by scholarly research, multiple viewpoints and ethical perspectives. This course will provide students the opportunity to explore the cultural, political and legal issues facing public education today.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Cultural Literacy & Community Building, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**ELEC 415 - Early Science and Math**

Students will apply theories of child development to the implementation of math and science in the early childhood curriculum. Using a constructivist approach, students will plan and implement activities designed to enhance cognitive development in these areas. Students will become aware of available materials for teaching and assessment.

Credits: 4

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

**ELEC 420 - Early Childhood Field Experience**

Candidates enroll as part of the Professional Block in Early Childhood Education. This course involves an in-depth teaching experience in an early childhood setting in which opportunities are provided for the application of content knowledge, pedagogical skills, and the assessment of children's learning.

Prerequisites: ELEC 330<sup>D</sup> and ELEC 340<sup>D</sup> and ELEC 311<sup>P</sup> and ELEC 316<sup>D</sup> and (SPED 325<sup>D</sup> or SPED 350<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

<sup>P</sup> Requires minimum grade of P.

Corequisite(s): ELEC 480

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 427 - Early Intervention**

This course will examine atypical development from birth through age eight. Legal rights of children and families will be explored. Student will study the interventions necessary to assist the young child and their families adjust and adapt to development difficulties. A field component is included.

Prerequisites: ELEC 327<sup>D</sup> and (ELEC 337<sup>D</sup> or ELEC 278<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 437 - Assessment in Early Childhood**

This course is an overview of the role of assessment at the preschool and primary grade levels as integral to curriculum and instructional decision-making. Content will focus on informal assessment measures recommended for early childhood classroom teachers. A field experience gives students the opportunity to apply a variety of assessment measures with young children.

Prerequisites: ELEC 427<sup>D</sup> and (ELEC 447<sup>D</sup> or ELEC 420<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 440 - ECE Curriculum Integration: Theory into Practice**

Development and implementation of an integrated program of all content areas across the learning standards Pre-K through Grade 4, through the integration of play-based, experience-based, and project-based teaching. Selection and development of materials and resources based on assessment data that meet the needs of culturally and linguistically diverse learners is stressed.

Prerequisites: ELEC 311<sup>D</sup> and ELEC 330<sup>D</sup> and ELEC 340<sup>D</sup> and ELEC 316<sup>D</sup> and SPED 325<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 445 - Administration of Child Care Programs**

Students are introduced in a practical manner to the procedures required to organize, license, and administer a child care program (including preschool and elementary aged children). This course involves a field experience of 5 hours.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 450 - Internship: Early Childhood**

This course is a supervised off-campus, full-time work experience in a certified Early Childhood Education program. Students attend seminars and complete additional assignments made by supervisors. Open only to Elementary Education: Early Learning and Development students.

Prerequisites: ELEC 447<sup>D</sup> or ELEC 420<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 455 - Student Teaching: Early Childhood**

Under the guidance of a cooperating teacher and university supervisor, candidates engage in teaching assignments on a full-time basis in specified school districts and/or early childhood agencies and attend scheduled seminars. Student teaching requires a partnership between the university and cooperating school districts and agencies. It is considered the culminating experience and the most beneficial teacher preparation course. It is a transition between pre-service and in-service teaching. Must meet all requirements to enroll in student teaching, including, but not limited to, required Praxis exams, grade point average, clearances, required courses and field experiences.

Credits: 1-12

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 460 - Instructional Strategies for Science and Technology**

This course is designed to introduce the teaching techniques and strategies used by science educators to make science teaching, meaningful, motivating, and plausible for PK-4 students. In addition, the most common curriculum units and supplements are introduced, explored, and examined for their appropriateness in the early childhood environment and the relationship to the PDE science standards. Emphasis is placed on how to collect and learn about scientific concepts in order to develop the skills necessary to teach coherent centers and/or lessons and choose instructional techniques that will most effectively help children learn. Lastly, confidence in teaching science is established as participants devise, employ, and assess science lessons presented to peers and young children.

Prerequisites: ELEC 311<sup>D</sup> and ELEC 330<sup>D</sup> and ELEC 340<sup>D</sup> and ELEC 316<sup>D</sup> and (SPED 325<sup>D</sup> or SPED 350<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): ELEC 470

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 470 - Social Studies & Citizenship**

Teacher candidates in this course will explore the social studies curriculum, including its organization; analyze methods of teaching, objectives, and materials; discuss evaluation/assessment techniques and citizenship development for PK-4 learners. Study focuses on best practice classroom applications and the relationship between instruction and student learning outcome.

Prerequisites: ELEC 311<sup>D</sup> and ELEC 330<sup>D</sup> and ELEC 340<sup>D</sup> and ELEC 316<sup>D</sup> and (SPED 325<sup>D</sup> or SPED 350<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): SPED 360

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 475 - International Student Teaching: Early Childhood**

Under the guidance of a cooperating teacher and university supervisor, candidates engage in teaching assignments on a full-time basis in specified school districts and/or early childhood agencies and attend scheduled seminars. Student teaching requires a partnership between the university and cooperating school districts and agencies. It is considered the culminating experience and the most beneficial teacher preparation course. It is a transition between pre-service and in-service teaching. This course is specially designed for those students participating in the international student teaching experience.

Credits: 1-12

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment limited to students in a B.S. in Education degree.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

Enrollment limited to students in the College of Education college.

**ELEC 480 - Assessment for Differentiation of Literacy Instruction**

The purpose of this course is to provide teacher candidates with information and experiences that will enable them to utilize formal and informal methods for assessing children's reading ability and materials for improving decoding, fluency, vocabulary, comprehension and motivation. This course we explore the various roles of assessment in education and will look at a variety of data sets to draw conclusions about how they might impact class- or school-level decision making. This course will also provide teacher candidates with information to differentiate their teaching to meet the needs of all learners.

Prerequisites: ELEC 238<sup>D</sup> and ELEC 330<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): ELEC 460

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 490 - Independent Study**

A program of independent work conducted by a student who has demonstrated academic proficiency, with prior approval of the student's advisor and departmental chairperson. Prerequisite: Permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisites: SEFE 200<sup>D</sup> and CDEV 248<sup>D</sup> and CDEV 342<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Early Childhood Education (PK-4), Bachelor of Science in Education (BSED)

All candidates completing this program and student teaching are eligible to receive Pennsylvania certification after achieving a passing or qualifying score on Pennsylvania Department of Education required exam(s). If you are interested in teaching in another state, please contact the Department of Education in that state.

### PROGRAM GOAL 1 Danielson Framework 1b: Demonstrating Knowledge of Students:

Child and adolescent development; Learning process; Special needs; Students' skills, knowledge, and language proficiency; Students' interests and cultural heritage

- **University Wide Outcome 2: Apply critical thinking to argument and problem solving:** Gather, analyze and evaluate information and ideas. Produce well-supported reasons and evidence. Reach well-argued conclusions and decisions. Use a variety of viewpoints and reflective thought.

### PROGRAM GOAL 2 Danielson Framework 1c: Setting Instructional Outcomes:

Value, sequence, and alignment; Clarity; Balance; Suitability for diverse learners

- **University Wide Outcome 2: Apply critical thinking to argument and problem solving:** Gather, analyze and evaluate information and ideas. Produce well-supported reasons and evidence. Reach well-argued conclusions and decisions. Use a variety of viewpoints and reflective thought.

### PROGRAM GOAL 3 Danielson Framework 1d: Demonstrate Knowledge of Resources:

Resources for Classroom Use; Resources to Extend Content Knowledge and Pedagogy; Resources for Students

- **University Wide Outcome 2: Apply critical thinking to argument and problem solving:** Gather, analyze and evaluate information and ideas. Produce well-supported reasons and evidence. Reach well-argued conclusions and decisions. Use a variety of viewpoints and reflective thought.

### PROGRAM GOAL 4 Danielson Framework 3a: Communicate with Students:

Expectations for Learning; Directions and Procedures; Explanations of Content; Use of Oral and Written Language

- **University Wide Outcome 1. Act as effective communicators:** Communicate successfully with diverse audiences in speech and writing. Demonstrate active listening skills. Apply analytical reading to support language use.
- **University Wide Outcome 9. Develop a worldview that acknowledges diversity and global interdependence:** Understand the importance of

diverse experiences, cultures, and identities. Understand the ways that group and individual inequalities and interactions impact self and society. Apply multiple perspectives to address local, regional, global, and cultural issues.

#### PROGRAM GOAL 5 Danielson Framework 3c: Engage Students in

**Learning:** Activities and Assignments; Grouping of Students, Instructional Materials and Resources; Structure and Pacing

- **Middle States Standards III.5.a:** Offer a sufficient scope to draw students into new areas of intellectual experience, expanding their cultural and global awareness and cultural sensitivity, and preparing them to make well-reasoned judgments outside as well as within their academic field
- **University Wide Outcome 9. Develop a worldview that acknowledges diversity and global interdependence:** Understand the importance of diverse experiences, cultures, and identities. Understand the ways that group and individual inequalities and interactions impact self and society. Apply multiple perspectives to address local, regional, global, and cultural issues.

#### PROGRAM GOAL 6 Danielson Framework 4e Growing and Developing

**Professionally:** Enhancement and Content Knowledge and Pedagogical Skills, Receptivity to Feedback from Colleagues, Service to the Profession

- **Middle States Standards II.2:** Foster a climate of respect among students, faculty, staff, and administration from a range of diverse backgrounds, ideas, and perspectives
- **University Wide Outcome 5. Develop as a whole person:** Acquire and apply knowledge and skills in the major and profession, including soft skills. Make connections beyond traditional disciplinary boundaries. Demonstrate a desire for lifelong learning. Establish an identity that incorporates emotional and physical wellness.

#### PROGRAM GOAL 7 Danielson Framework 4f: Demonstrating

**Professionalism:** Integrity and Ethical Conduct, Service to Students, Advocacy, Decision Making

- **University Wide Outcome 8. Act ethically:** Respect the range of ethical perspectives. Understand their own values and principles. Recognize the consequences and impacts of their actions on others.

## Related Links

Early Childhood Education, BSED Program Page (<https://www.sru.edu/academics/majors-and-minors/early-childhood-education/>)

Elementary Education/ Early Childhood Education Department Page (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/elementary-education/-early-childhood/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

GPA must be 2.8 or higher for Teacher Candidacy.

A 3.0 GPA and passing subject area assessment (PECT) or a 2.8 GPA and a *qualifying* passing subject area assessment (PECT) score (as determined by PDE) is required for certification.

## Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	70
	Electives	8

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 210	Mathematics for Elementary Teachers I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15

### Additional Rock Studies 2 Requirements (12 credits)

MATH 310	Mathematics for Elementary Teachers II	3
PE 243	Educational Movement in Health & Wellness	3
or DANC 223	Creative Dance for Children	
SOWK 105	Human Diversity	3
SPED 121	Overview of Special Education	3
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.



Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 35 major credits must be taken at SRU or PASSHE
- 35 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Early Childhood Education Courses</b>		
(Prior to Admittance into Teacher Candidacy Program)		
ELEC 100	Early Childhood Education Theory & Practice <sup>1</sup>	3
ELEC 200	Child Development Typical <sup>1</sup>	3
PE 243	Educational Movement in Health & Wellness <sup>1</sup>	3
or DANC 223	Creative Dance for Children	
SPED 121	Overview of Special Education <sup>1</sup>	3
Subtotal		12
<b>Diversity Block<sup>2</sup></b>		
ELEC 230	Field-Based Child Development Typical <sup>1</sup>	3
ELEC 237	ELL Strategies and Practice for Early Childhood Education <sup>1</sup>	3
ELEC 281	Family and Community Diversity and Partnerships <sup>1</sup>	3
Subtotal		9
<b>Early Literacy Block<sup>2</sup></b>		
ELEC 238	Literacy Practices for the Emergent Learner, PK-1 <sup>1</sup>	3
ELEC 285	Integrating Creative Expression through the Arts <sup>1</sup>	3
Subtotal		6
<b>Early Childhood Major Courses</b>		

Must be admitted to Teacher Candidacy Program and have completed both Diversity and Literacy blocks above

### Block 1

ELEC 311	Mathematics & Literacy Teaching Lab Pre K - 4 <sup>1</sup>	1
ELEC 316	Developmental Formal and Informal Assessments <sup>1</sup>	3
ELEC 330	Literacy Practices for the Developing Learner, Grades 2 - 4 <sup>1</sup>	3
ELEC 340	Mathematics Methods and Strategies for PRE K - 4 Teachers <sup>1</sup>	3
SPED 350	Universal Intervention <sup>1</sup>	3
Subtotal		13
<b>Block 2<sup>3</sup></b>		
ELEC 420	Early Childhood Field Experience <sup>1</sup>	3
ELEC 460	Instructional Strategies for Science and Technology <sup>1</sup>	3
ELEC 470	Social Studies & Citizenship <sup>1</sup>	3
ELEC 480	Assessment for Differentiation of Literacy Instruction <sup>1</sup>	3
SPED 360	Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners <sup>1</sup>	3
Subtotal		15

### Other Required Coursework for Graduation

ELEC 348	Leadership, Advocacy & Program Development <sup>1</sup>	3
ELEC 455	Student Teaching: Early Childhood <sup>1</sup>	12
or ELEC 475	International Student Teaching: Early Childhood	
Subtotal		15
<b>Total Hours</b>		<b>70</b>

<sup>1</sup> Course counts for 50% of Major requirements but not for Major GPA

<sup>2</sup> Pre-requisite ELEC 100 & ELEC 200.

<sup>3</sup> Pre-req is Block 1

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs
2. High-Impact Practice (HIP) designated classes
3. Student-Faculty research and Student Leadership development
4. Career Education and Development
5. Internships/Field Experiences (required)

## Important Information

### Prerequisites for Admission to Teacher Candidacy

- Grades below a "C" are not admissible.

Code	Title	Hours
<b>Basic Courses</b>		
ELEC 100	Early Childhood Education Theory & Practice	3
ELEC 200	Child Development Typical	3
ELEC 230	Field-Based Child Development Typical	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
<b>Math Requirement for BS in Education</b>		
Prior to Admission to Teacher Candidacy		
MATH 210	Mathematics for Elementary Teachers I	3
MATH 310	Mathematics for Elementary Teachers II	3
<b>Total Hours</b>		<b>21</b>

### BSED Early Childhood PK-4 Grade Requirement

- Grades in each of the following courses must be "C" or better to qualify for Student Teaching and/or Graduation

Code	Title	Hours
ELEC 100	Early Childhood Education Theory & Practice	3
ELEC 200	Child Development Typical	3
ELEC 230	Field-Based Child Development Typical	3
ELEC 237	ELL Strategies and Practice for Early Childhood Education	3
ELEC 238	Literacy Practices for the Emergent Learner, PK-1	3
ELEC 281	Family and Community Diversity and Partnerships	3
ELEC 285	Integrating Creative Expression through the Arts	3
ELEC 311	Mathematics & Literacy Teaching Lab Pre K - 4	1
ELEC 316	Developmental Formal and Informal Assessments	3
ELEC 330	Literacy Practices for the Developing Learner, Grades 2 - 4	3
ELEC 340	Mathematics Methods and Strategies for PRE K - 4 Teachers	3
ELEC 348	Leadership, Advocacy & Program Development	3
ELEC 420	Early Childhood Field Experience	3
ELEC 455	Student Teaching: Early Childhood	12
ELEC 460	Instructional Strategies for Science and Technology	3
ELEC 470	Social Studies & Citizenship	3
ELEC 480	Assessment for Differentiation of Literacy Instruction	3
PE 243 or DANC 223	Educational Movement in Health & Wellness Creative Dance for Children	3
SPED 121	Overview of Special Education	3
SPED 350	Universal Intervention	3
SPED 360	Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners	3

### EARLY CHILDHOOD EDUCATION - BSED (1100)

Pre K-4 Certification

This program is effective as of Fall 2021.

Revised 07.08.20201

UCC 03.02.2021

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ELEC 100	Early Childhood Education Theory & Practice	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SCI 101	Science of Life	3
SPED 121	Overview of Special Education	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ELEC 200	Child Development Typical	3
ENGL 104	Critical Reading	3
MATH 210	Mathematics for Elementary Teachers I	3
SCI 102	Understanding the Physical World	3
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
<b>Diversity Block</b>		
ELEC 230	Field-Based Child Development Typical	3
ELEC 237	ELL Strategies and Practice for Early Childhood Education	3
ELEC 281	Family and Community Diversity and Partnerships	3
MATH 310	Mathematics for Elementary Teachers II	3
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
<b>Early Literacy Block</b>		
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	

ELEC 238	Literacy Practices for the Emergent Learner, PK-1	3
ELEC 285	Integrating Creative Expression through the Arts	3
PE 243 or DANC 223	Educational Movement in Health & Wellness or Creative Dance for Children	3
Social Science Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
SOWK 105	Human Diversity	3
Free Elective		9
ELEC 348	Leadership, Advocacy & Program Development	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
<b>Block 1</b>		
ELEC 311	Mathematics & Literacy Teaching Lab Pre K - 4	1
ELEC 316	Developmental Formal and Informal Assessments	3
ELEC 330	Literacy Practices for the Developing Learner, Grades 2 - 4	3
ELEC 340	Mathematics Methods and Strategies for PRE K - 4 Teachers	3
SPED 350	Universal Intervention	3
Free Elective		3
<b>Hours</b>		<b>16</b>
<b>Fourth Year</b>		
<b>Fall</b>		
<b>Block 2</b>		
ELEC 420	Early Childhood Field Experience	3
ELEC 460	Instructional Strategies for Science and Technology	3
ELEC 470	Social Studies & Citizenship	3
ELEC 480	Assessment for Differentiation of Literacy Instruction	3
SPED 360	Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ELEC 455	Student Teaching: Early Childhood	12
Free Elective		3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>122</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

\* Students are encouraged to take ESAP 101 as a Free Elective.

Major Code: 1100  
Revised 01.13.2021

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing

courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

## Early Childhood Education (PK-4), Bachelor of Science in Education (BSED) - Concentration in International Education

All candidates completing this program and student teaching are eligible to receive Pennsylvania certification after achieving a passing or qualifying score on Pennsylvania Department of Education required exam(s). If you are interested in teaching in another state, please contact the Department of Education in that state.

The mission of the international concentration is to equip, inspire, and empower teacher candidates by providing them opportunities to develop their personal and professional global awareness; to deepen their understanding of culturally responsive teaching and to experience international teaching in order to be prepared for teaching in the 21st century.

## Related Links

Early Childhood Education - International Education, BSED Program Page (<https://www.sru.edu/academics/majors-and-minors/early-childhood-education-international-education/>)

Elementary Education/Early Childhood Education Department Page (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/elementary-education/-early-childhood/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

GPA must be 2.8 or higher for *Teacher Candidacy*.

A 3.0 GPA and passing subject area assessment (PECT) or a 2.8 GPA and a *qualifying* passing subject area assessment (PECT) score (as determined by PDE) is required for certification.

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	70
	Electives	8

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 210	Mathematics for Elementary Teachers I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry - Select 3 Credits</i>		3
ART 226	Overview of World Art	
DANC 130	Dance: Art and Culture	
MUSI 102	Exploring World Music	
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Additional Rock Studies 2 Requirements (12 credits)</b>		
MATH 310	Mathematics for Elementary Teachers II	3
PE 243	Educational Movement in Health & Wellness	3
or DANC 223	Creative Dance for Children	
SOWK 105	Human Diversity	3
SPED 121	Overview of Special Education	3
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		

Select one of the following at SRU or another post-secondary institution:

CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 35 major credits must be taken at SRU or PASSHE
- 35 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Early Childhood Education Courses</b>		
(Prior to Admittance into Teacher Candidacy Program)		
ELEC 100	Early Childhood Education Theory & Practice <sup>1</sup>	3
ELEC 200	Child Development Typical <sup>1</sup>	3
PE 243	Educational Movement in Health & Wellness <sup>1</sup>	3
or DANC 223	Creative Dance for Children	
SPED 121	Overview of Special Education <sup>1</sup>	3
Subtotal		12
<b>Diversity Block <sup>2</sup></b>		
ELEC 230	Field-Based Child Development Typical <sup>1</sup>	3
ELEC 237	ELL Strategies and Practice for Early Childhood Education <sup>1</sup>	3
ELEC 281	Family and Community Diversity and Partnerships <sup>1</sup>	3
Subtotal		9
<b>Early Literacy Block <sup>2</sup></b>		
ELEC 238	Literacy Practices for the Emergent Learner, PK-1 <sup>1</sup>	3
ELEC 285	Integrating Creative Expression through the Arts <sup>1</sup>	3
Subtotal		6
<b>Early Childhood Major Courses</b>		
Must be admitted to Teacher Candidacy Program and have completed both Diversity and Literacy blocks above		
<i>Block 1</i>		
ELEC 311	Mathematics & Literacy Teaching Lab Pre K - 4 <sup>1</sup>	1
ELEC 316	Developmental Formal and Informal Assessments <sup>1</sup>	3
ELEC 330	Literacy Practices for the Developing Learner, Grades 2 - 4 <sup>1</sup>	3
ELEC 340	Mathematics Methods and Strategies for PRE K - 4 Teachers <sup>1</sup>	3
SPED 350	Universal Intervention	3

Subtotal		13
<b>Block 2 (Pre-req is Block 1)</b>		
ELEC 420	Early Childhood Field Experience <sup>1</sup>	3
ELEC 460	Instructional Strategies for Science and Technology <sup>1</sup>	3
ELEC 470	Social Studies & Citizenship <sup>1</sup>	3
ELEC 480	Assessment for Differentiation of Literacy Instruction <sup>1</sup>	3
SPED 360	Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners <sup>1</sup>	3
Subtotal		15
<b>Other Required Coursework for Graduation</b>		
ELEC 405	Overview of and Immersion in Global Education <sup>1</sup>	3
ELEC 455	Student Teaching: Early Childhood	12
Subtotal		15
<b>Other International Requirements</b>		
Must complete one (1) spring break, care break or early field in an international setting.		
<b>Total Hours</b>		<b>70</b>

<sup>1</sup> Course counts for 50% of Major requirements but not for Major GPA

<sup>2</sup> Pre-requisite ELEC 100 & ELEC 200.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs
2. High-Impact Practice (HIP) designated classes
3. Student-Faculty research and Student Leadership development
4. Career Education and Development
5. Internships/Field Experiences (required)

## Important Information

### Prerequisites for Admission to Teacher Candidacy

- Grades below a "C" are not admissible.

Code	Title	Hours
<b>Basic Courses Required</b>		
ENGL 102	Critical Writing	3
ELEC 100	Early Childhood Education Theory & Practice	3
ELEC 200	Child Development Typical	3
ELEC 230	Field-Based Child Development Typical	3
ENGL 104	Critical Reading	3
Subtotal		15
<b>Math Requirement for BS in Education</b>		
Prior to Admission to Teacher Candidacy		
MATH 210	Mathematics for Elementary Teachers I	3
MATH 310	Mathematics for Elementary Teachers II	3

Subtotal	6
<b>Total Hours</b>	<b>21</b>

### BSED Early Childhood PK-4 Grade Requirement

- Grades in each of the following courses must be "C" or better to qualify for Student Teaching and/or Graduation

Code	Title	Hours
ELEC 100	Early Childhood Education Theory & Practice	3
ELEC 200	Child Development Typical	3
ELEC 230	Field-Based Child Development Typical	3
ELEC 237	ELL Strategies and Practice for Early Childhood Education	3
ELEC 238	Literacy Practices for the Emergent Learner, PK-1	3
ELEC 281	Family and Community Diversity and Partnerships	3
ELEC 285	Integrating Creative Expression through the Arts	3
ELEC 311	Mathematics & Literacy Teaching Lab Pre K - 4	1
ELEC 316	Developmental Formal and Informal Assessments	3
ELEC 330	Literacy Practices for the Developing Learner, Grades 2 - 4	3
ELEC 340	Mathematics Methods and Strategies for PRE K - 4 Teachers	3
ELEC 405	Overview of and Immersion in Global Education	3
ELEC 420	Early Childhood Field Experience	3
ELEC 460	Instructional Strategies for Science and Technology	3
ELEC 470	Social Studies & Citizenship	3
ELEC 475	International Student Teaching: Early Childhood	1-12
ELEC 480	Assessment for Differentiation of Literacy Instruction	3
PE 243	Educational Movement in Health & Wellness	3
or DANC 223	Creative Dance for Children	
SPED 121	Overview of Special Education	3
SPED 350	Universal Intervention	3
SPED 360	Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners	3

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*



PASSHE - Pennsylvania State System of Higher Education Institutions

EARLY CHILDHOOD EDUCATION PK-4 CERTIFICATION - BSED  
(1100/0024)

Concentration in International Education (INTL/INTR)

This program is effective as of Fall 2021.

Revised 11.03.2022

UCC 10.25.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ELEC 100	Early Childhood Education Theory & Practice	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SCI 101	Science of Life	3
SPED 121	Overview of Special Education	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ELEC 200	Child Development Typical	3
ENGL 104	Critical Reading	3
MATH 210	Mathematics for Elementary Teachers I	3
SCI 102	Understanding the Physical World	3
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
<b>Diversity Block</b>		
ELEC 230	Field-Based Child Development Typical	3
ELEC 237	ELL Strategies and Practice for Early Childhood Education	3
ELEC 281	Family and Community Diversity and Partnerships	3
MATH 310	Mathematics for Elementary Teachers II	3
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
<b>Early Literacy Block</b>		
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
ELEC 238	Literacy Practices for the Emergent Learner, PK-1	3
ELEC 285	Integrating Creative Expression through the Arts	3
PE 243 or DANC 223	Educational Movement in Health & Wellness or Creative Dance for Children	3
SOWK 105	Human Diversity	3
<b>Hours</b>		<b>15</b>

### Third Year

#### Fall

ELEC 348	Leadership, Advocacy & Program Development	3
Social Science Inquiry (p. 29)		3
Minor Course or Free Electives		9
<b>Hours</b>		<b>15</b>

#### Spring

##### Block 1

ELEC 311	Mathematics & Literacy Teaching Lab Pre K - 4	1
ELEC 316	Developmental Formal and Informal Assessments	3
ELEC 330	Literacy Practices for the Developing Learner, Grades 2 - 4	3
ELEC 340	Mathematics Methods and Strategies for PRE K - 4 Teachers	3
SPED 350	Universal Intervention	3
Minor Course or Free Elective		3
<b>Hours</b>		<b>16</b>

### Fourth Year

#### Fall

##### Block 2

ELEC 420	Early Childhood Field Experience	3
ELEC 460	Instructional Strategies for Science and Technology	3
ELEC 470	Social Studies & Citizenship	3
ELEC 480	Assessment for Differentiation of Literacy Instruction	3
SPED 360	Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners	3
<b>Hours</b>		<b>15</b>

#### Spring

ELEC 455	Student Teaching: Early Childhood	12
Free Elective		3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>122</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 1100

Revised 01.13.21

## Global Education, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Global Education Minor, Page

Elementary Education/ Early Childhood Education Department Page (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/elementary-education/-early-childhood/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or Higher

### Minor Requirements

- Students must complete at least 6 credits in their minor from SRU.
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Core Courses</b>		
CDEV 248 or ELEC 200	Human Development and Education Child Development Typical	3
ELEC 237 or SEFE 326	ELL Strategies and Practice for Early Childhood Education ELL Strategies and Practice	3
Subtotal		6
<b>Electives</b>		
Select four of the following:		12
SPED 353	Teaching in an Area of High Need	
SPAN 110	Spanish for Educators	
ELEC 405	Overview of and Immersion in Global Education	
SEFE 420	American Education in the Twenty-First Century: A Comparative Perspective	
MODL 3XX/4XX	Any Modern Language Course at 300 level or higher <sup>1</sup>	
Subtotal		12
<b>Total Hours</b>		<b>18</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

<sup>1</sup> Any Modern Language Course at 300 level or higher.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN GLOBAL EDUCATION (11A)

This program is effective as of Fall 2020.

Revised 09.02.20

UCC 04.21.20

## Physical and Health Education

Chair	Secretary	Location	Department Phone
Dr. Joanne Leight	Sherri Novad	109 Morrow Field House	724-738-2072

Department Web Site URL (<http://www.sru.edu/academics/colleges-and-departments/coe/departments/physical-and-health-education/>)

Physical Activity and Fitness Management Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/PAFM-FS.pdf>)

School Wellness Education Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/phe-fs.pdf>)

### Vision for the future—What our students will do

Graduates of the SRU Physical and Health Education Department will be leaders who educate and empower individuals to be physically active and healthy and who advocate the benefits associated with a healthy lifestyle.

### Mission—Current—Day to Day—What we do

Prepare graduates who are passionate about health, physical activity and fitness, to promote lifelong physical activity, cognitive function, and overall physical wellness.

## The Rock Difference

The Department of Physical and Health Education offers a major degree program in Health and Physical Education. The two concentrations are:

- School Wellness Education - Teacher Certification Program that prepares students to teach both health and physical education in grades K-12
- Physical Activity and Fitness Management that prepare students to teach, lead and manage physical activity and fitness in community and commercial settings

Statistics project the employment of health and wellness educators will grow faster than the average for all occupations for the foreseeable future. These careers continue to grow as a direct result of healthcare costs and increasing need for awareness of disease prevention and health promotion. This results in the need for *Aquatic Professionals* - *Adapted Physical Activity Professionals* - *Outdoor Professionals* - and *Coaching Education Professionals*.

## Faculty

### Gary Clark

Associate Professor  
Physical and Health Education  
Ph.D., University of Pittsburgh  
M.S., Western Kentucky University  
B.S., Lock Haven University

**Wendy Fagan**  
Instructor

Physical and Health Education  
M.S., Texas Woman's University  
B.S., Indiana University

#### **Hannah Holl**

Associate Professor  
Physical and Health Education  
Ed.D., Indiana University of Pennsylvania  
M.Ed., Indiana University of Pennsylvania  
B.S., Lock Haven University

#### **Ethan Hull**

Associate Professor  
Physical and Health Education  
Ph.D., University of Pittsburgh  
M.S., University of Pittsburgh  
M.Ed., East Stroudsburg University  
B.S. University of Pittsburgh

#### **Dallas Jackson**

Associate Professor  
Physical and Health Education  
Ph.D., Texas Woman's University  
M.S., Texas Woman's University  
B.S., University of North Texas

#### **Istvan Kovacs**

Associate Professor  
Physical and Health Education  
Ph.D., Eotvos Lorand University (Budapest)  
M.S., Hungarian University of Physical Education  
B.S., Hungarian University of Physical Education

#### **Joanne Leight**

Professor  
Physical and Health Education  
Ed.D., Duquesne University  
M.S., Slippery Rock University  
B.S., Slippery Rock University

#### **Wenhao Liu**

Professor  
Physical and Health Education  
Ph.D., University of Georgia  
M.A., University of Northern Iowa  
B.Ed., Wuhan Institute of Physical Education (China)

#### **Randall Nichols**

Professor  
Physical and Health Education  
Ed.D., West Virginia University  
M.Ed., Slippery Rock University  
B.S., Slippery Rock University

#### **Robert Ogoreuc**

Assistant Professor  
Physical and Health Education  
M.Ed., Slippery Rock University  
B.S., Indiana University of Pennsylvania

#### **Jeffrey Smith**

Assistant Professor  
Physical and Health Education  
M.S., Slippery Rock University

B.S., Slippery Rock University

#### **Traci Zillifro**

Professor  
Physical and Health Education  
Ph.D., Pennsylvania State University  
M.A., Edinboro State University  
B.S., Kent State University

## **Programs**

### **Majors**

- Health and Physical Education, Bachelor of Science in Education (BSED) - Concentration in Physical Activity and Fitness Management (p. 187)
- Health and Physical Education, Bachelor of Science in Education (BSED) - Concentration in Physical Activity and Fitness Management / Pre-Athletic Training (SRU) (3+2) (p. 191)
- Health and Physical Education, Bachelor of Science in Education (BSED) - Concentration in Physical Activity and Fitness Management / Pre-Athletic Training (SRU) (Traditional) (p. 194)
- Health and Physical Education, Bachelor of Science in Education (BSED) - Concentration in Physical Activity and Fitness Management / Pre-Occupational Therapy (SRU) (3+3) (p. 197)
- Health and Physical Education, Bachelor of Science in Education (BSED) - Concentration in Physical Activity and Fitness Management / Pre-Occupational Therapy (SRU) (Traditional) (p. 201)
- Health and Physical Education, Bachelor of Science in Education (BSED) - Concentration in School Wellness Education (p. 204)

### **Minors**

- Adapted Physical Activity, Minor (p. 185)
- Adventure Fitness, Minor (p. 186)
- Aquatics, Minor (p. 187)
- Physical Education - Coaching, Minor (p. 208)
- Wellness, Minor (p. 209)

### **Certificates**

- Living Well, Certificate (p. 208)
- Teaching Health and Physical Education On-line, Certificate (p. 209)

## **Courses**

#### **PE 106 - Gymnastics Fundamentals**

This course is based on the study of PreK-12 developmentally appropriate gymnastics, with the recognition of individual and group uniqueness, acknowledging and valuing diversity. An emphasis will be placed on an educational gymnastics approach, utilizing movement concepts appropriate for teaching children body awareness and body control. Students will also learn skill progressions, spotting techniques, and biomechanical principles involved in a variety of gymnastic skills performed on traditional and non-traditional gymnastics equipment.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching or Health and Physical Education.

**PE 107 - Aquatic Fundamentals**

This course is designed to provide the student with an overview of a variety of aquatic activities. Consideration is given to basic swimming strokes, starts and turns, small craft safety, skin diving, elementary non-swimming rescue techniques, diving progressions from the deck, springboard diving, synchronized swimming, water polo, personal fitness, and aquatic games. This is a Theory and Technique Course (open to Physical Education majors or Aquatics minors only).

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment is limited to students with a program in School Wellness Education, Health-Physical Educ Teaching, Health and Physical Education or Aquatics.

**PE 113 - Golf**

This course is designed to introduce the student to all phases of golf through application of the skills used in these activities. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

Term(s) Typically Offered: Offered as Needed

**PE 114 - Orienteering**

This course is designed to teach the fundamental skills for traveling in the outdoors by map and compass in unfamiliar territory, and to introduce the sport of orienteering. The sport involves competitive cross country hiking/running on a set course as accurately and quickly as possible. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

Term(s) Typically Offered: Offered as Needed

**PE 115 - Yoga and Well-Being**

Yoga and Well-Being is an experiential and theoretical course that will introduce the student to the practice and examination of Yoga. The course will cover the practice of yoga postures (asanas), the use of controlled breathing (ujjayi) the engagement of body locks (bandhas), the study of yoga's historic background and the benefits of meditation and relations techniques. Additionally it will examine postures from an anatomical perspective providing the student with a comprehensive examination of proper alignment and correct positioning of the body in order to avoid injury. The course will present the many benefits of Yoga at a physical, mental and emotional level, and its application to the needs of our society today.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course

**PE 123 - Stand-Up Paddle Boarding**

This introductory course is designed to explore the fundamental skills and safety concepts necessary to paddle stand-up paddle boards (SUPs) effectively. Safety procedures will be emphasized such as, selection of waterways appropriate for an individual's skill set and experience level, self-rescue and group rescue approaches. Various paddling techniques including power strokes, turning strokes and bracing with the paddle will be examined. In addition, equipment selection and care, boating regulations, trip planning and logistics, outdoor leadership, basic water reading skills, flat water navigation skills, white water classification and minimum environmental impact techniques will be addressed. An overview of the various types of stand-up paddle boards (SUP) as well as necessary safety equipment will be explored.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms Odd

**PE 125 - Bicycling**

This introductory course is designed to explore the fundamental skills and safety concepts necessary to participate in bicycling effectively. Cycling techniques related to both on-road and off-road will be examined. Safety procedures, bicycling control, fitness and social benefits to the rider will be emphasized. Current trends in cycling technology will be examined. Additionally, strategies to minimize environmental impact will be explored.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms Even

**PE 131 - Foundations of Leadership in Physical Activity**

This course is designed to introduce the student majoring in Leadership in Physical Activity to the history, philosophies, professional organizations, important concepts, careers and trends in physical activity leadership.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**PE 133 - Tai Chi Chuan: Chinese Classical Exercise**

An introduction to the Chinese Classical Exercise System inspired by the Chinese "Book of Changes. Tai Chi Chuan concentrates on relaxed movement, proper breathing and attention to posture. Any age or physical performance level may participate. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

Term(s) Typically Offered: Offered as Needed

**PE 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**PE 140 - Downhill Snow Skiing I**

This course students to acquire a basic knowledge and appreciation of skiing as a sport and as a life-time leisure activity. Safety procedures and skiing etiquette also are discussed. Instruction takes place at Peek N' Peak Ski Resort. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

Term(s) Typically Offered: Offered as Needed

**PE 141 - Personal Physical Fitness**

This course provides students the opportunity for individual assessment and exercise programs to improve and/or maintain physical fitness and weight control. Principles involved with the maintenance of physical fitness, weight control, diets, and the aging process will be provided through lecture. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

Term(s) Typically Offered: Offered as Needed

**PE 146 - Beginning Swimming**

This course is designed to provide the novice or non-swimmer with the opportunity to learn elementary back stroke, water safety skills, diving and adjustment to water. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

Term(s) Typically Offered: Offered as Needed

**PE 149 - Tennis**

This course teaches basic fundamentals. The rules, regulations, and history of tennis also will be covered, along with strategies of the single and double games. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

Term(s) Typically Offered: Offered as Needed

**PE 152 - Principles of School Wellness I**

This course is an orientation to the art and the science of teaching physical education at the K-12 levels. Framed within the Collaborative Approach to Learning and Health: Whole School, Whole Community, Whole Child, students will study this latest collaborative approach to learning and health which is reflective of a local community and anchored in schools. Required school observations in diverse settings will provide students with the experience to observe and reflect upon class climate, responsibilities for fostering a positive learning environment and high quality teaching. The study of health trends in youth will envelop the latest model of how schools are promoting a comprehensive school-based physical activity model and the role physical education teacher play in it. Schools central to professional development including a writing assessment, resume development and starting a professional portfolio are used as artifacts of reflective practice at this initial state of teacher education. This is a Theory course (open to Physical Education majors only).

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching or Health and Physical Education.

**PE 166 - Coaching Practicum**

The coaching practicum is designed to provide the student with a realistic experience at a level and in a setting similar to that in which he/she wishes to obtain employment. The practicum experience is a 50-hour learning opportunity in which the student assists in all phases of the operation of an athletic program. The student may not be the head coach, unless a direct supervisor is present. The student may not be a current participating athlete on the team. The student may not work with the same team twice. Each experience must be at a different level if working with the same sport. A minimum of two different sports must be included in the practicum experiences. (For example: HS baseball, Little League baseball, HS football). Each student must complete a contract with the athletic program and submit the contract to the coaching practicum coordinator (University supervisor) for approval. The coordinator will then contact the athletic program for verification of the learning experience, dates of the experiences and details of evaluation procedures.

Prerequisites: PE 106<sup>D</sup> and (PE 171<sup>D</sup> or PE 356<sup>D</sup>) and PE 175<sup>D</sup> and PE 177<sup>D</sup> and (PE 260<sup>D</sup> or PE 242<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Spring & Summer Terms

**PE 168 - Physical Activity and Wellbeing in Society**

This course introduces students to inquiry techniques and strategies used to study human behavior in the social sciences. Also reviewed are patterns of social behavior as they relate to physical activity and well-being. Students will examine why physical activity behaviors have changed over time, and the effects these changes have had on humans and society. Students will analyze physical activity trends and initiatives throughout the world, and using a social-ecological approach will design a solution for how communities, businesses, schools and workplaces can re-engineer physical activity back into society.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**PE 175 - Teaching of Track and Field**

Emphasizes track and field skill acquisition along with identification of appropriate teaching methods associated with these activities. This is a Theory and Technique Course (open to Physical Education majors only).

Credits: 1

Term(s) Typically Offered: Offered as Needed

**PE 177 - Teaching of Self-Defense/Lacrosse**

The course deals with the skills, knowledge, and attributes needed for self-defense and lacrosse. This course also emphasizes the teaching, coaching, officiating, and physical skill development of men's and women's lacrosse. This is a Theory and Technique Course (open to Physical Education majors only).

Credits: 1

Term(s) Typically Offered: Offered as Needed



**PE 181 - Adventures in Backpacking**

This course teaches the basic knowledge and skills of backpacking travel in a temperate environment. Techniques such as how to use and to carry a backpack, hiking skills including route selection and trail negotiation with a pack, map, and compass techniques, knowledge and care of backpacking equipment, planning backpacking trips, and environmentally sound backpacking skills will be covered. The course includes a mandatory weekend trip to put skills to practical use. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

Term(s) Typically Offered: Offered as Needed

**PE 182 - Introduction to Rock Climbing**

This course introduces students to the fundamental skills of top rope rock climbing. Beginning skills in belaying, static climbing, rappelling, prussiking, artificial wall climbing safety considerations and minimal environmental approaches will be covered. The student will be introduced to various teaching methodologies and classroom management approaches specific to rock climbing community and commercial settings.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms

**PE 184 - Adventure Games**

This course is designed to provide physical activity and direct experience in adventure challenges requiring self-discipline, willingness to try, and personal commitment. Coursework includes physical fitness and flexibility exercises, aerobic games, cooperative games and nongames, group initiatives, trust activities, and challenge course low and high elements involving perceived physical and psychological risk and challenges. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

Term(s) Typically Offered: Offered as Needed

**PE 186 - Cross Country Skiing and Snowshoeing**

This introductory course is designed to explore the fundamental skills and safety concepts necessary to participate in cross country skiing and snowshoeing effectively. The physical and cognitive benefits of outdoor aerobic activities will be addressed. Safety approaches to cold weather activities will be explored. Various skiing and snowshoeing techniques including diagonal stride, kick concept, double poling, descending/ascending, striding, turning and walking/running will be examined. In addition, equipment selection and care, trip planning and logistics, and minimum environmental impact techniques will be addressed.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

**PE 187 - Flat-water Canoe Tripping**

This course teaches the basic skills and concepts of flat-water canoe camping, such as how to enter and to exit a canoe, tandem paddling techniques, canoe safety, and canoe portaging. Students will also learn basic canoe camping skills, including food planning, how to use camping equipment, and minimum impact camping techniques. Students will participate in a mandatory weekend canoe camping experience to put learned skills to practical use. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

Term(s) Typically Offered: Offered as Needed

**PE 188 - Sailing**

This course offers students an opportunity to develop skills, to learn techniques, and to achieve personal satisfaction in beginning sailing. The course also involves the knowledge and application of the rules of water safety to the sport of sailing. This class is designed for beginners. At its conclusion students will be able to enjoy sailing as a lifetime recreational sport. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

Term(s) Typically Offered: Offered as Needed

**PE 189 - Basic Canoeing**

Instruction focuses on the fundamental skills and concepts needed to operate a canoe effectively. Furthermore, the student will be introduced to various teaching methodologies and classroom management approaches for teaching in non-traditional settings. Safety procedures will be emphasized including self-rescue and group rescue approaches. Various paddling techniques including power strokes, turning strokes and bracing with the paddle will be examined. In addition, equipment selection and care, boating regulations, trip planning and logistics, outdoor leadership, basic water reading skills, white water clarification and minimum environmental impact techniques will be addressed. An overview of the various types of and safety equipment will be explored.

Credits: 2

Term(s) Typically Offered: Offered as Needed

**PE 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PE 191 - Foundations of School Wellness**

This course is designed to introduce the student to the historical, philosophical, cultural and sociological influences that have shaped the profession of teaching health and physical education. A foundational perspective will be taken to clarify the related disciplines, history and current issues of health and physical education and of education, from the ancient cultures to the 21st century. Including the framework involved in the Whole School, whole child, whole Community (WSCC) Model, the Comprehensive School Physical Activity Program (CSPAP) and the Health Optimizing Physical Education (HOPE) Model.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching or Health and Physical Education.

**PE 192 - Diversity Issues in Physical Education**

This course will explore differences among students within a variety of physical education settings. Students will learn about other people and explore how others view participation in physical activity and exercise. This course will help students become sensitive to and appreciate the diversity of others, thus, demonstrating responsible social behaviors that will enable them to interact in a positive manner with diverse groups within the physical education enrichment. This is a Theory and Technique Course.

Credits: 2

Term(s) Typically Offered: Offered as Needed

Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching or Health and Physical Education.

**PE 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**PE 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PE 202 - Technology for Wellness**

This course is designed to provide the student with an overview of the various types of technology that can be utilized in the area of wellness and fitness. The purpose of this course is to familiarize and enhance students' technology skills to support instruction in various education, wellness and fitness settings. The course includes personal computer use in creating materials to enhance instruction, promotion and assessment. Also included are other emerging technologies, in addition to various internet options. A portion of the course will be conducted using SRU's Learning Management System.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**PE 227 - Introduction to Adapted Physical Activity**

Develop an understanding of disabilities and apply that knowledge in the application of active-living, community-based physical activity programs.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**PE 230 - Teaching and Coaching of Track & Field**

This course is designed to introduce the student to the teaching and coaching aspects of track & field. Skill acquisition, strength and conditioning methods, teaching and coaching skills and historical perspectives of track & field will be studied. Emphasis will be placed on planning and applying developmentally appropriate activities for all learners.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms, Offerings Vary

**PE 231 - Strategies for Teaching Physical Activity**

This course is designed to teach evidence-based educational methods and adult learning strategies to equip the student to educate individuals throughout the lifespan through: 1) a basic understanding of learning and developmental theories; 2) communication techniques; 3) positive behavior management; 4) environmental modifications; and 5) group engagement strategies.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**PE 236 - Introduction to Kayaking**

This introductory course is designed to explore the fundamental skill and safety concepts necessary to paddle a kayak effectively. Safety procedures will be emphasized such as entering and exiting the kayak, the bow rescue, the Eskimo roll, as well as self-rescue and group-rescue approaches. Various paddling techniques including power strokes, turning strokes, and bracing with the paddle will be examined. In addition, equipment selection and care, boating regulations, tripping planning and logistics, outdoor leadership, basic water reading skills, white water classification and minimum environmental impact techniques will be addressed. An overview of the various types of kayaks and kayaking, such as whitewater kayaks, sit-on-top kayaks, and touring kayaks, as well as necessary safety equipment, will be explored.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

**PE 237 - Emergency Medical Response**

This course is designed to provide the student with the knowledge and skills necessary to work as an emergency medical responder (EMR) to help sustain life, reduce pain and minimize the consequences of injury or sudden illness until more advanced medical help takes over. The course content meets or exceeds the current Emergency Medical Services Educational Standards for Emergency Medical Responders and current NATA Education Competencies.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**PE 238 - Applied Principles of Exercise**

This course will provide students with an understanding of applied exercise principles associated with both health and skill related fitness, topics will include: warm up and cool down protocols, exercise frequency, intensity, type and time (FITT) principles, overload, progression, specificity, regularity and individuality (Basic Training Principles) and target heart-rate.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**PE 240 - Downhill Snow Skiing II**

Advanced techniques of downhill skiing are presented. Instruction takes place at Peek N' Peak Resort. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

Term(s) Typically Offered: Offered as Needed

**PE 241 - Outdoor Pursuits**

This course is designed to introduce the student to the varied but interrelated topics of outdoor pursuits, adventure programming, experiential education, group problem-solving, and cooperative games philosophy. The course will provide physical activity, direct experience, and leadership techniques in adventure challenges which require self-discipline, a willingness to try, and personal commitment. This is a Theory and Technique Course.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course

**PE 242 - Physical Health and Fitness Education**

This course is designed to provide knowledge of evidence based benefits associated with regular physical activity along with knowledge to develop, organize, administer and assess age appropriate physical activity and fitness programs for children, adolescents and adults.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**PE 243 - Educational Movement in Health & Wellness**

This course helps students achieve individual competency in applying educational gymnastics, fundamental movement, educational/multicultural games and educational/creative dance to learn Laban's educational movement concepts through the use of cooperative learning, problem solving and guided discovery. Students construct developmentally appropriate interdisciplinary standards-based expressive movement experiences that show meaningful application to children's learning inclusive of children with special needs and English language learners. Content will also address health and wellness concepts central to grades PreK-4 as it relates to educational movement. Students will reflect (metacognition) upon their educational movement experiences including but not limited to individual competency, diversity, critical thinking, core subject integration and differentiating instruction.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Transfer Thread Completion Course

**PE 250 - Equine Assisted Activities**

An introduction to equine assisted activities including basic safety skills, lesson preparation, benefits for individuals with disabilities, tack/equine selection, and certification procedures. Students will gain practical experience through riding horses and assisting individuals with disabilities during lessons.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**PE 253 - Principles of School Wellness II**

This course is an orientation to the art and the science of teaching physical and health at the K-12 levels. Framed within the National Standards & Grade Level Outcomes for K-12 Physical Education (SHAPE America, 2014) pre-service teacher candidates will study curriculum models, grade level outcomes, class organization, management and safety techniques, developmentally appropriate communication techniques, health and wellness integration strategies infused in lessons, locating and using professional resources for planning and teaching, lesson plan writing, a spectrum of direct and indirect teaching styles, systematic observation tools, teaching and post-lesson reflecting. Skills central to professional development include lesson plan writing, class organization and management documentation, systematic observation of teaching, post-lesson reflecting. Pre-service teacher candidates will build on the professional portfolio started in PE 152 using artifacts.

Prerequisites: PE 152<sup>C</sup> and PE 383<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2.

Enrollment is limited to students with a program in School Wellness Education.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**PE 258 - Social & Emotional Wellness**

This course is designed to examine topics relating to psychosocial health & wellness of school aged youth as a part of a comprehensive approach to school wellness. Future educators will learn how to address topics such as respect and appreciation for all persons, bullying, conflict resolution, stress reduction, suicide prevention, depression, anxiety and high-risk behavior with K-12 students.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**PE 262 - Adapted Aquatics**

Develop knowledge base in the study of disability through discussion and practical experiences as it relates to aquatic programming.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**PE 263 - Lifeguarding**

The lifeguarding course is designed to provide lifeguard candidates with skills and knowledge necessary to keep patrons of aquatic facilities safe in and around water. This course includes techniques with aquatic-specific first aid and cardiopulmonary resuscitation (CPR) training, Automated External Defibrillation, Oxygen Administration and training in specific water environments. Offered to all students.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**PE 266 - Disability Sport in the 21st Century: A Global Perspective**

This course is designed to introduce the students to the study of Disability Sport across the world. Students will study the history, current movement, and future developments of Disability Sport in an ever changing and emerging field of sport for persons with disabilities.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**PE 268 - Contemporary Topics in Health**

This course is designed to introduce students to current issues in health and wellness and provide opportunities for students to assess health needs in school and community settings. In this course, students will identify programs and initiatives that promote healthy living and improve well-being based on the health needs of society.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**PE 270 - Psychological and Sociological Bases of Sport**

This course provides students with an understanding of the relationships between sport and various psychological and sociological factors. This is a Theory and Technique Course.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching, PE-Physical Activ&Fitness Mgmt, Health and Physical Education or Athletic Training.

**PE 272 - Enhancing Fitness through Running and Walking**

This course is designed to teach students how to personally perform and to lead others in aerobic physical activities using indoor and outdoor settings. This course focuses on leading fitness enhancing activities through running, trail-running, Nordic walking, community walking and hiking. These activities are designed to improve aerobic fitness, manage weight and promote healthy lifestyles. The settings include roadways, trails and community common areas. Course content centers on individual and group health and fitness, and strategies for conveying this information.

Credits: 2

Term(s) Typically Offered: Offered as Needed

**PE 274 - Assessment Strategies in Physical Education**

This course content is designed to give the student an understanding of assessment techniques used in physical education. Students will learn the various techniques used for assessing as applied in the public school setting. Students will have the opportunity to use several of the computer applications related to physical education. This is a Theory and Technique Course.

Prerequisite: PE 152<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching or Health and Physical Education.

**PE 275 - Women in Sport**

This course emphasizes the problems, processes and patterns of sport involvement of women in utilizing an historical, sociological, psychological and biological approach. The focus is primarily on women in the United States, although the sport participation of women in other cultures is also examined. This is a Theory and Technique Course (open to Physical Education majors only).

Credits: 3

Term(s) Typically Offered: Offered as Needed

**PE 276 - Skate-Based Action Sports**

This course explores the fundamental skills and safety concepts necessary to engage in skate-based action sports effectively. Safety procedures such as, choosing locations and terrain appropriate for an individual's skill set and experience level are emphasized. Skate-based learning progressions address various skating techniques including proper stance, effective stopping, efficient pushing, turning, carving, sliding, core-specific land paddling strokes and bracing with the paddle. In addition, equipment selection and care, safety equipment requirements, regulations, trip planning and logistics, outdoor adventure leadership, and minimum environmental impact techniques are examined. There is an overview of the various types of skateboards longboards/land paddling boards and in-line skates as well as necessary safety equipment.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

**PE 289 - Advanced Canoeing**

This course teaches students the advanced skills and techniques of canoeing. Safety instruction is emphasized. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

Term(s) Typically Offered: Offered as Needed

**PE 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PE 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**PE 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PE 301 - Sports Officiating**

This diverse class is designed to provide the student with an overview of the techniques required for officiating various sports. The official's role and rules of the game(s) will be presented, and opportunities will be provided for practical officiating experience. This will be followed by comprehensive analysis of the student's officiating style, knowledge of the rules and professionalism.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 302 - Foundations of Online Teaching and Learning**

The course is designed to provide learners opportunities to understand the foundations of distance education. Students will be able to demonstrate competencies and skills to apply instructional strategies to develop curriculum that meets the needs of distant learners. In addition, students will be able to use various assessment methods to evaluate student learning through distance education.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**PE 303 - Using Educational Technology to Enhance Learning**

This course is designed to provide students with the knowledge and skills necessary to effectively use educational technology to enhance learning in both a traditional face-to-face classroom and also through distance or cyber education.

Credits: 3

Term(s) Typically Offered: Offered Winter Terms

Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**PE 304 - Teaching Physical Education through Distance Education**

This course is designed to provide students with the knowledge and skills necessary to effectively teach physical education through distance or cyber education.

Prerequisites: PE 302<sup>C</sup> and PE 303<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**PE 305 - Teaching Health Education through Distance Education**

This course is designed to provide students with the knowledge and skills necessary to effectively teach health education through distance or cyber education.

Prerequisites: PE 302<sup>C</sup> and PE 303<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**PE 306 - Conditioning for Athletic Performance**

This course is designed to engage and immerse students in the theory and application of power and speed training as well as athletic motor skill development. Students will study the relationships among biomotor abilities and apply training principles and methods associated with the development of power-based athletic skills. Students will design and apply daily-, short- and long-term training programs for coaching athletes who seek improved athletic performance.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 310 - Elementary School Wellness Skills and Fitness Activities**

This course is designed to engage and immerse the student in the Society for Health and Physical Education (SHAPE) elementary grade level standards for health and physical education knowledge and skills. Along with these standards this course will engage students in developmentally appropriate activities and lesson plan concepts that will ensure the teacher candidates understand the developmental progression of fundamental motor skills, their application to higher level movement, fitness and rhythmic. Teacher candidates will develop knowledge to create physically literate elementary aged learners who are prepared to lead a healthy active and well life.

Prerequisites: PE 152<sup>C</sup> and PE 383<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**PE 311 - Middle School Wellness Skills and Fitness Activities**

This course is designed to engage and immerse the teacher candidate in the Society for Health and Physical Education (SHAPE) middle school grade level standards for health and physical education knowledge and skills. Along with these standards this course will engage teacher candidates in developmentally appropriate activities and lesson plan concepts that will ensure that they understand how to develop physical skills and knowledge to create physically literate middle school aged learners are prepared to lead a healthy active and well life.

Prerequisite: PE 310<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**PE 312 - Secondary School Wellness Skills and Fitness Activities**

This course is designed to engage and immerse the teacher candidate in the Society for Health and Physical Education (SHAPE) high school grade level standards for health and physical education knowledge and skills. Along with these standards this course will engage teacher candidates in developmentally appropriate activities and lesson plan concepts that will ensure that they understand how to develop specialized health optimizing physical activity and knowledge to create physically literate high school aged learners who are prepared to be healthy and active adults and college or career ready.

Prerequisite: PE 310<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.



**PE 328 - School Nutrition and Wellness**

This course will provide students with information about the K-12 school nutrition environment and school nutrition services as defined by the Society of Health and Physical Educators (SHAPE America). Students will learn strategies for teaching K-12 students to reach and maintain a healthy weight as well as strategies for modeling healthy dietary behaviors and providing opportunities for healthy eating in schools. The role of the collaboration between school wellness educators, food service personnel, School Nurses and Registered Dietitians for improving students' nutrition and wellness will be discussed. This course is designed to provide the student with an understanding of the fundamental aspects of nutrition concepts and how they are applied to the K-12 settings.

Prerequisite: PE 268<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**PE 331 - Evidence-Based Physical Activity**

This course is designed to introduce students in current theories, models and successful interventions used in physical activity promotion including: factors/barriers influencing physical activity among children/adolescents and adults. The focus of the course is on the acquisition of evidence-based practices that lead to appropriate assessment strategies, implementation models and evaluative techniques.

Prerequisites: PE 131<sup>D</sup> and PE 231<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**PE 332 - Administration and Management of Physical Activity**

This course is designed to teach students how to ethically administer, manage and evaluate physical activity programs in the community with respect to managing operations, developing and managing financial resources and managing human resources.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**PE 334 - Applied Methodologies in Adventure**

This course is designed to teach evidence-based educational methods and learning strategies to equip the student to educate individuals in a variety of adventure throughout the lifespan through variety of adventure activities. A number of pertinent topics specific to adventure education will be addressed including, foundational knowledge, self-awareness and professional conduct, decision making and judgment, experiential teaching and facilitation, environmental stewardship, adventure program management, adventure safety and risk management, inclusive learning, and technical ability.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in School Wellness Education, Health-Physical Educ Teaching, Health and Physical Education or Adventure Fitness.

**PE 335 - Science of the Mind-Body Connection**

This course will introduce students to a variety of fitness activities such as yoga, Pilates along with other physical activities associated with nature all with a mind and body connection and associated with stress management and overall health-related fitness. This course will explore the interconnectedness of the mind and body in relation to quality of life and prevention of chronic disease.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Conservation, Technology & Imagination, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 338 - Teaching and Leading Group Exercise**

This course provides opportunities for practical skills and instruction to prepare the student to teach and lead various large group fitness activities involving children, adolescents and adults. Emphasis is placed on design, developmental appropriateness, safety and modifications for diverse populations who are apparently healthy.

Prerequisite: PE 238<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 342 - Wellness through Movement**

This course is designed to provide the student with scientifically based knowledge concerning the benefits of physical activity along with the consequences associated with a lack of physical activity both on a personal and societal level. Students will participate in application of physical activity training, health-related fitness assessments and lifestyle modification activities.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 345 - Teaching and Coaching of Water Polo**

This course is designed to introduce the student to the teaching and coaching aspects of water polo. Skill acquisition, strategy and tactics, strength and conditioning, teaching and coaching skills for water polo will be studied. Emphasis will be placed on planning and applying developmentally appropriate activities for all learners.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 348 - Aquatic Leadership**

This course is designed to prepare students for leadership responsibilities in the field of aquatics. Program development, facility operation, risk management, and staff management will be included in this course.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 349 - Skin and Scuba Diving**

This course provides students with the opportunity to learn a wide variety of skin and scuba diving skills, including rescue techniques. In addition, emphasis will be placed upon the following: 1) selection, care, and use of diving equipment, 2) physical and biological aspects of various diving environments, 3) first aid as applied to scuba diving, including cardio-pulmonary resuscitation, and 4) aspects of physics, physiology, and medicine related to the diver's performance in the water. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 352 - Secondary Physical Education Teaching Methods**

Designed as a third level pedagogy class. This course offers "in-depth continuation of the study and application of effective teaching and learning in the secondary physical education classroom. This is a Theory and Technique Course (open to Physical Education majors only).

Prerequisite: PE 274<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching or Health and Physical Education.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**PE 353 - Adapted Physical Activity and Health Through the Lifespan**

This course is designed to investigate the concept of transition across the lifespan with regard to health promotion and physical activity for individuals with disabilities. Students will develop and implement appropriate physical activity programs for specific developmental lifespan stages.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 356 - Net/Wall Activities and Games**

This course is designed to introduce the student to games and skills associated with a variety of racquet activities and games, which will include tennis, badminton, racquetball, volleyball, and table tennis. Emphasis will be placed on planning and applying developmentally appropriate activities for all learners. This is a Theory and Technique Course (open to Physical Education majors only).

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 357 - Territory Activities and Games**

This course is designed to introduce the student to the games and skills associated with a variety of territory activities and games, which will include flag football, basketball, hockey and soccer. Emphasis will be placed on planning and applying developmentally appropriate activities for all learners.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 358 - Lifetime/Leisure Activities and Games**

This course is designed to introduce the student to the games and skills associated with a variety of target activities including, but not limited to, golf, bowling, and archery. Emphasis will be placed on planning and applying developmentally appropriate activities for diverse learners. This is a Theory and Technique Course (open to Physical Education majors only).

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 359 - Striking/Fielding Activities and Games**

This course is designed to introduce the student to the games and skills associated with a variety of striking/fielding activities, which will include softball, cricket, and rounders. Emphasis will be placed on planning and applying developmentally appropriate activities for all learners. This is a Theory and Technique Course (open to Physical Education majors only).

Credits: 2

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 360 - Anatomical and Physiological Basis of Physical Activity/Lab**

This course is designed to provide the basic anatomical and physiological principles that have direct application to physical activity movement and health for populations. Weekly laboratory sessions will provide practical application experiences to illustrate the theoretical knowledge base.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 362 - School Health Education Methods**

The course focuses on Health Education curriculum design and developmentally appropriate instructional techniques that can be utilized for health promotion in school settings. Course included universally accepted pedagogical strategies with opportunities to observe and practice these strategies with K-12 health education content.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students in the BSED1151 program.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**PE 363 - Lifeguarding Instructor**

The purpose of the Lifeguarding Instructor course is to train instructor candidates to teach lifeguard training, first aid, lifeguard management, CPR for the professional rescuer, AED essentials, oxygen administration for the professional rescuer, preventing disease transmission, community water safety, and basic water rescue. The training in this instructor course prepares instructor candidates by developing their understanding of how to use course materials, how to conduct training sessions, and how to evaluate participants' progress.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 364 - Biomechanics of Individuals with Disabilities**

A study of human movement patterns with emphasis on the development of efficient movement for special populations. Efficient movement patterns will be based on anatomical, mechanical, and physiological principles.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 369 - Philosophy and Psychology of Coaching**

This course emphasizes the relationships involved in the association of the coach with the administration, student body, players, press and community. This is a Theory and Technique Course.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 378 - Teaching and Leading of Strength and Resistance Training**

This course is designed to provide practical knowledge to prepare students to teach, lead and effectively design individualized weight training and/or a muscular fitness programs. Students will apply principles of resistance training in a hands-on setting with specific emphasis on techniques, strength and endurance training, safety procedures, equipment and individualized programming.

Prerequisite: PE 238<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 379 - Fitness Management**

This course provides the knowledge base to effectively design, promote, manage and assess health related fitness programs in a variety of community and commercial facilities. A wide range of teaching, leading and managing practices associated directly with health fitness facilities will be reviewed.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 383 - Motor Development and Learning**

This course introduces the student to the factors influencing the changes in the development and learning of motor skills from infancy to adolescence. Practical laboratory activities are utilized to illustrate basic concepts of motor development and motor learning. This is a Theory and Technique Course (open to Physical Education majors only).

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1 or Freshman 2 may **not** enroll.

Enrollment is limited to students with a major in School Wellness Education or Health-Physical Educ Teaching.

**PE 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 393 - Nutrition for Physical Activity, Exercise, and Health**

Students in this course will study nutrition guidelines and standards for physical activity, exercise, and health. This course will cover metabolism, macro and micronutrients, energy expenditure, and fluid and electrolyte requirements. Current trends and claims of diets and supplements will be evaluated, and nutrition differences between individuals and athletes will be discussed.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Cultural Literacy & Community Building, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PE 420 - Field Experience**

This course is designed to provide students with experiences which allow them to apply their knowledge and skills in a practical worksite situation. This is a Theory and Technique Course (open to Physical Education majors only).

Corequisite(s): PE 042

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 430 - Living Well**

This course, which is the capstone course for the Living Well program is designed to engage and immerse the student in evidence-based literature related to living well while building self-evaluation and motivation strategies. Content areas emphasized will be physical activity, nutrition/dietary guidelines and stress. This course will also engage students in experiential education opportunities and reflection on these experiences. These experiences will be anchored by co-curricular opportunities provided on campus through the Aebersold Recreation Center, Aramark Nutrition Services, the Slippery Rock University Health Center and the Slippery Rock University Leadership office.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**PE 446 - Water Safety Instruction**

The purpose of this instructor course is to train instructor candidates to teach American Red Cross Swimming and Water Safety courses. It is a certification course for American Red Cross Water Safety Instructor (WSI).

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 450 - Internship**

Supervised placement or research in selected private or public agencies.

Prerequisites: PE 131<sup>D</sup> and PE 231<sup>D</sup> and PE 202<sup>D</sup> and PE 331<sup>D</sup> and PE 332<sup>D</sup> and PE 473<sup>D</sup> and PE 242<sup>D</sup> and PE 360<sup>D</sup> and PE 268<sup>D</sup> and PE 335<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 1-12

Term(s) Typically Offered: Offered Fall, Spring, & Summer

**PE 452 - Elementary Strategies for School Wellness**

This professional methods course will provide the preservice teacher candidate with knowledge and skills to effectively contribute to a culture of school wellness through a high quality physical and health education program. Students will develop best-practice planning, teaching and assessment strategies and apply them in a semester-long field experience involving grades K-6. This will also include designing initiatives from leading comprehensive school wellness programs.

Prerequisites: PE 253<sup>D</sup> and PE 310<sup>D</sup> and PE 328<sup>D</sup> and PE 383<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 6

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching or Health and Physical Education.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**PE 455 - Student Teaching - Physical Education**

Under the guidance of a cooperating teacher and university supervisor, students in this course engage in two eight-week assignments on a full-time basis in specified school districts and attend scheduled seminars. Additional assignments required. This is a Theory and Technique Course (open to Physical Education majors only).

Prerequisite: PE 452<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 12

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching or Health and Physical Education.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**PE 460 - Program Design in Adapted Physical Activity**

Develops competencies in the implementation of developmentally appropriate activities for children and adults with disabilities in the school and through transitional programs conducted within the community.

Prerequisite: PE 227<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 462 - Secondary Strategies in School Wellness**

This professional methods course will provide the preservice teacher candidate with knowledge and skills to teach and lead school wellness education at the middle and high school levels. Strategies for facilitating lessons and activities that promote lifelong physical activity and overall wellness will be employed; and the teacher candidate will work collaboratively with a public school mentor teacher under the supervision of the university professor(s) to implement these strategies in schools.

Prerequisites: PE 268<sup>D</sup> and PE 253<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 6

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching or Health and Physical Education.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**PE 468 - Senior Seminar in Physical and Health Education Teacher Education**

This course is designed to provide a capstone overview of the organization, management and application of physical education and health instructional and extra-class programs. Content focuses on current issues and trends in the discipline. This is a Theory and Technique Course (open to Physical Education majors only).

Prerequisite: PE 352<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 2

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching or Health and Physical Education.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**PE 472 - School Wellness Assessment and Promotion**

Provide teacher candidates with conceptual tools to analyze health-related behaviors of school-aged learners and the social, cultural and environmental context in which they occur. This course will apply theories drawn from public health, psychology and sociology to the process of planning and evaluating wellness instruction in schools that assists learners in developing and maintaining healthy behaviors. The process of collecting, tracking and analyzing health-related data will be included in the course as well as current applications, programs and tools that can be used to track and improve health behaviors.

Prerequisite: PE 253<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Corequisite(s): PE 462

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**PE 473 - Professionalism, Advocacy and Leadership in Physical Activity**

This course is designed to actively involve the learner in an advanced study of physical activity. The course is conducted in seminar format and the students will study the application of the principles, methods, organization and administration of individualized physical activity programs and the development of professional, advocacy and leadership qualities and skills.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 485 - Fundraising/Grant Writing in Adapted Physical Activity**

This course is designed to develop competencies in fund raising strategies utilizing grant writing skills geared toward corporations and charitable foundations. Students will study the specific skills needed to develop a funding concept, preparation of the proposal, and the establishment of relationships with potential donors.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with department of Special Education or Physical and Health Education.

**PE 490 - Independent Study**

With the approval of the students' advisors and departmental chairperson, students may pursue an individual project in physical education especially suited to meet the students' needs. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**PE 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Adapted Physical Activity, Minor

The Adapted Physical Activity (APA) program is dedicating to serving individuals of various ages and disabilities by promoting health and wellness, as well as empowering them to reach their full potential.



Slippery Rock University (SRU) offers the only APA undergraduate minor in the entire state of Pennsylvania.

## MISSION

To provide an opportunity for students to demonstrate professionalism, advocacy and leadership qualities in professional preparation programs by improving the health, physical activity, and wellness of individuals with disabilities.

## PROGRAM LEARNING OUTCOMES

- **Communication and Technology:** Communicate effectively in speech and in writing, using appropriate information sources, presentation formats, and technologies.
- **Professional Proficiency:** Apply knowledge, skills, and abilities to meet professional competencies in physical activity for individuals with disabilities.
- **Critical Thinking and Problem Solving:** Locate, analyze, synthesize, and evaluate information and ideas from multiple perspectives.
- **Advocacy:** Apply advocacy skills to assist in the support of health promotion, healthy lifestyles, physical activity, and wellness for individuals with disabilities.
- **Leadership:** Use advocacy and leadership skills to assist in promotion of independence, healthy lifestyles, and well-being for individuals with disabilities.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Adapted Physical Activity, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/adapted-physical-activity-minor/>)

Physical and Health Education Department Page (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/physical-and-health-education/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits

Code	Title	Hours
<b>Required Courses</b>		
PE 227	Introduction to Adapted Physical Activity	3
PE 262	Adapted Aquatics	3
PE 266	Disability Sport in the 21st Century: A Global Perspective	3
PE 353	Adapted Physical Activity and Health Through the Lifespan	3
PE 460	Program Design in Adapted Physical Activity	3

PE 473	Professionalism, Advocacy and Leadership in Physical Activity	3
<b>Total Hours</b>		<b>18</b>

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN ADAPTED PHYSICAL ACTIVITY (61B)

This program is effective as of Fall 2013.

Revised 10.28.2021

## Adventure Fitness, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Adventure Fitness, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/adventure-fitness-minor/>)

Physical and Health Education Department Page (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/physical-and-health-education/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (an upper division course includes any 3 credit course that requires a pre-requisite)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Adventure Fitness Required Courses</b>		
PE 241	Outdoor Pursuits	3
PE 342	Wellness through Movement	3
PE 332	Administration and Management of Physical Activity	3
PE 334	Applied Methodologies in Adventure	3
<b>Adventure Fitness Elective Classes</b>		
Select six credits of the following:		6
PE 123	Stand-Up Paddle Boarding	
PE 125	Bicycling	

PE 182	Introduction to Rock Climbing	
PE 186	Cross Country Skiing and Snowshoeing	
PE 236	Introduction to Kayaking	
PE 272	Enhancing Fitness through Running and Walking	
PE 276	Skate-Based Action Sports	
PE 349	Skin and Scuba Diving	
<b>Total Hours</b>		<b>18</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN ADVENTURE FITNESS (61F)

This program is effective as of Fall 2018.

Revised 04.09.2020

## Aquatics, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Aquatics, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/aquatics-minor/>)

Physical and Health Education Department Page (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/physical-and-health-education/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits

Code	Title	Hours
<b>Required Aquatic Core</b>		
PE 107	Aquatic Fundamentals	3

PE 262	Adapted Aquatics	3
PE 263	Lifeguarding	3
PE 348	Aquatic Leadership	2

### Aquatic Instructor Courses

PE 363	Lifeguarding Instructor	3
PE 446	Water Safety Instruction	3

### Aquatic Electives

Select two of the following courses: 2-6

PE 123	Stand-Up Paddle Boarding
PE 187	Flat-water Canoe Tripping
PE 189	Basic Canoeing
PE 236	Introduction to Kayaking
PE 237	Emergency Medical Response
PE 345	Teaching and Coaching of Water Polo
PE 349	Skin and Scuba Diving

**Total Hours 19-23**

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN AQUATICS (61D)

This program is effective as of Fall 2018.

Revised 11.09.2021

## Health and Physical Education, Bachelor of Science in Education (BSED) - Concentration in Physical Activity and Fitness Management

The Physical Education - Physical Activity and Fitness Management concentration will prepare professionals to plan, implement, and evaluate physical activity programs in corporate, community, and non-profit settings. The physical activity and fitness management concentration has intellectual value in academia while addressing emerging regional and national employment trends, student interests and preferences, and community need. The uniqueness of this concentration centers around a personnel preparation core combined with students preferred choice of two of five well-established and emerging specialty areas.

## Program Learning Outcomes

- **Instructional Excellence:** Develop Physical Activity and Fitness Managers who educate and empower individuals to lead active healthy lifestyles.
- **Physical Health and Wellness Competency:** Develop Physical Activity and Fitness Managers who prepare individuals for an active lifestyle through purposeful movement and healthy nutrition.
- **Social, Emotional and Cognitive Wellness:** Develop Physical Activity and Fitness Managers who prepare individuals with strategies to improve cognition, manage stress and positively interact with others.
- **Physical Activity Management in Community and Commercial Settings:** Prepare Physical Activity and Fitness Managers to coordinate and lead comprehensive wellness programs that promote health literacy and physical activity in Community and Commercial Settings.
- **Professional Advocate and Leader:** Develop professionals who model and value health and advocate for quality health and wellness in schools and communities.

## Related Links

Health and Physical Education - Physical Activity and Fitness Management, BSED Program Page (<https://www.sru.edu/academics/majors-and-minors/physical-activity-and-fitness-management/>)

Physical and Health Education Department Page (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/physical-and-health-education/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	60
	Electives	18

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	

PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.
- <sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this

requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Core Courses</b>		
PE 131	Foundations of Leadership in Physical Activity <sup>1</sup>	3
PE 202	Technology for Wellness <sup>1</sup>	3
PE 231	Strategies for Teaching Physical Activity <sup>1</sup>	3
PE 331	Evidence-Based Physical Activity <sup>1</sup>	3
PE 332	Administration and Management of Physical Activity <sup>1</sup>	3
PE 450	Internship <sup>1</sup>	6
PE 473	Professionalism, Advocacy and Leadership in Physical Activity <sup>1</sup>	3
Subtotal		24
<b>Fitness/Health Courses</b>		
PE 242	Physical Health and Fitness Education <sup>1</sup>	3
PE 268	Contemporary Topics in Health <sup>1</sup>	3
PE 335	Science of the Mind-Body Connection <sup>1</sup>	3
PE 360	Anatomical and Physiological Basis of Physical Activity/Lab <sup>1</sup>	3
Subtotal		12
<b>Blocks</b>		
Select two of the following blocks A, B, C, D or E		24
<i>Block A: Adapted Physical Activity</i>		
PE 227	Introduction to Adapted Physical Activity <sup>1</sup>	
PE 353	Adapted Physical Activity and Health Through the Lifespan <sup>1</sup>	
PE 460	Program Design in Adapted Physical Activity <sup>1</sup>	
Select three credits from the following:		
PE 262	Adapted Aquatics	
PE 266	Disability Sport in the 21st Century: A Global Perspective	
<i>Block B: Aquatics</i>		
PE 107	Aquatic Fundamentals (Required) <sup>1</sup>	
PE 348	Aquatic Leadership (Required) <sup>1</sup>	
PE 446	Water Safety Instruction <sup>1</sup>	
Select four credits from the following:		
PE 123	Stand-Up Paddle Boarding <sup>1</sup>	
PE 189	Basic Canoeing <sup>1</sup>	
PE 236	Introduction to Kayaking <sup>1</sup>	
PE 237	Emergency Medical Response <sup>1</sup>	
PE 262	Adapted Aquatics <sup>1</sup>	
PE 263	Lifeguarding <sup>1</sup>	
PE 345	Teaching and Coaching of Water Polo <sup>1</sup>	
PE 349	Skin and Scuba Diving <sup>1</sup>	
PE 363	Lifeguarding Instructor <sup>1</sup>	

*Block C: Outdoor Adventure Fitness*

PE 241	Outdoor Pursuits <sup>1</sup>
PE 334	Applied Methodologies in Adventure <sup>1</sup>
Select six credits from the following:	
PE 123	Stand-Up Paddle Boarding <sup>1</sup>
PE 125	Bicycling <sup>1</sup>
PE 182	Introduction to Rock Climbing <sup>1</sup>
PE 186	Cross Country Skiing and Snowshoeing <sup>1</sup>
PE 236	Introduction to Kayaking <sup>1</sup>
PE 272	Enhancing Fitness through Running and Walking <sup>1</sup>
PE 276	Skate-Based Action Sports <sup>1</sup>
PE 349	Skin and Scuba Diving <sup>1</sup>
<i>Block D: Coaching Education</i>	
PE 270	Psychological and Sociological Bases of Sport (Required) <sup>1</sup>
PE 306	Conditioning for Athletic Performance (Required) <sup>1</sup>
PE 369	Philosophy and Psychology of Coaching (Required) <sup>1</sup>
Select three credits from the following:	
PE 230	Teaching and Coaching of Track & Field <sup>1</sup>
PE 237	Emergency Medical Response <sup>1</sup>
PE 238	Applied Principles of Exercise <sup>1</sup>
PE 266	Disability Sport in the 21st Century: A Global Perspective <sup>1</sup>
PE 301	Sports Officiating <sup>1</sup>
PE 338	Teaching and Leading Group Exercise <sup>1</sup>
PE 356	Net/Wall Activities and Games <sup>1</sup>
PE 358	Lifetime/Leisure Activities and Games <sup>1</sup>
PE 378	Teaching and Leading of Strength and Resistance Training
PE 393	Nutrition for Physical Activity, Exercise, and Health
<i>Block E: Fitness</i>	
PE 238	Applied Principles of Exercise <sup>1</sup>
PE 393	Nutrition for Physical Activity, Exercise, and Health
Select six credits from the following:	
PE 338	Teaching and Leading Group Exercise <sup>1</sup>
PE 378	Teaching and Leading of Strength and Resistance Training
PE 379	Fitness Management <sup>1</sup>
Subtotal	24
<b>Total Hours</b>	<b>60</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student

success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. Student-faculty research
3. Student leadership development
4. Service-learning classes
5. Career education and development
6. Internship
7. Volunteering

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Health and Physical Education - BSED (1158)

Concentration in Physical Activity and Fitness Management (PAFM)

This program is effective as of Spring 2020.

Revised 10.29.2021

UCC 02.18.20

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
PE 131	Foundations of Leadership in Physical Activity	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
PE 231	Strategies for Teaching Physical Activity	3
PE 242	Physical Health and Fitness Education	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
PE 202	Technology for Wellness	3
SCI 101	Science of Life	3

PAFM Specialty Area		3
PAFM Specialty Area		3
Social Science Inquiry (p. 29)		3
Elective/Minor		3
Declare a Thematic Thread <sup>2</sup>		
Hours		18
Spring		
PE 331	Evidence-Based Physical Activity	3
PE 268	Contemporary Topics in Health	3
SCI 102	Understanding the Physical World	3
PAFM Specialty Area		3
Thematic Thread Requirement (p. 29)		3
Elective/Minor		3
Hours		18
Third Year		
Fall		
PE 332	Administration and Management of Physical Activity	3
PE 360	Anatomical and Physiological Basis of Physical Activity/Lab	3
PAFM Specialty Area		3
Thematic Thread Requirement (p. 29)		3
Elective/Minor		3
Elective/Minor		3
Hours		18
Spring		
PE 335	Science of the Mind-Body Connection	3
PAFM Specialty Area		3
PAFM Specialty Area		3
Thematic Thread Requirement (p. 29)		3
Elective/Minor		3
Elective/Minor		3
Hours		18
Fourth Year		
Fall		
PE 473	Professionalism, Advocacy and Leadership in Physical Activity	3
PAFM Specialty Area		3
PAFM Specialty Area		3
Thematic Thread Requirement (p. 29)		3
Elective/Minor		3
Hours		15
Spring		
PE 450	Internship	6-12
Hours		6-12
Total Hours**		124-130

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.



*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

Major Code: 1158

Concentration Code: PAFM

Revised: 01.18.2021

## Health and Physical Education, Bachelor of Science in Education (BSED) - Concentration in Physical Activity and Fitness Management / Pre-Athletic Training (SRU) (3+2)

The Physical Education - Physical Activity and Fitness Management concentration will prepare professionals to plan, implement, and evaluate physical activity programs in corporate, community, and non-profit settings. The physical activity and fitness management concentration has intellectual value in academia while addressing emerging regional and national employment trends, student interests and preferences, and community need. The uniqueness of this concentration centers around a personal preparation core combined with students preferred choice of two of five well-established and emerging specialty areas.

The proposed Health & Physical Education/Physical Activity & Fitness Management Pre-Athletic Training 3+2 (PAFM Pre-AT 3+2) program is designed to give students an opportunity to enrich their undergraduate education with an intensive program in PAFM and facilitate their entry into the Master of Science in Athletic Training at SRU. The course work is tailored to meet the needs of the student both as an HPE/PAFM major and to prepare them for a Masters of Athletic Trainer program.

### Program Learning Outcomes

- **Instructional Excellence:** Develop Physical Activity and Fitness Managers who educate and empower individuals to lead active healthy lifestyles. (SRU 1, 2, 3)
- **Physical Health and Wellness Competency:** Develop Physical Activity and Fitness Managers who prepare individuals for an active lifestyle through purposeful movement and healthy nutrition. (SRU 1, 2, 3)
- **Social, Emotional and Cognitive Wellness:** Develop Physical Activity and Fitness Managers who prepare individuals with strategies to improve cognition, manage stress and positively interact with others. (SRU 5, 8)
- **Physical Activity Management in Community and Commercial Settings:** Prepare Physical Activity and Fitness Managers to coordinate and lead comprehensive wellness programs that promote health literacy and physical activity in Community and Commercial Settings. (SRU 7,9)
- **Professional Advocate and Leader:** Develop professionals who model and value health and advocate for quality health and wellness in schools and communities. (SRU 7, 9)

### Related Links

Health and Physical Education - Physical Activity and Fitness Management, BSED / Pre-Athletic Training (SRU) (3+2) Program Page

(<https://www.sru.edu/academics/colleges-and-departments/coe/departments/physical-and-health-education/undergraduate-programs/>)

Physical and Health Education Department Page (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/physical-and-health-education/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT – HEALTH & PHYSICAL EDUCATION

**1<sup>st</sup> Major: Health & Physical Education, Physical Activity & Fitness Management**

- Overall GPA: 2.00 or higher

**2<sup>nd</sup> Major: Pre-AT SRU 3+2 Health & Physical Education, Physical Activity & Fitness Management**

- Overall GPA: 3.00 or higher

### SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	44
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	55
	Electives	21

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the 1<sup>st</sup> year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.

### ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
BIOL 209		4

Physical Science Inquiry		
PHYS 201	Elements of Physics I with Lab	4
Subtotal		17
Thematic Thread		
Must choose a Thematic Thread with at least 2 AT Prerequisite classes including PSYC 105		
Select 12 Credits (p. 29) <sup>2,3</sup>		12
Total Hours		44

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject
- <sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.
- <sup>3</sup> Additional Athletic Training prerequisite courses may be fulfilled in a Thematic Thread.

Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
Total Hours		0-3

Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
Total Hours		0-3

DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

MAJOR REQUIREMENTS

- If you choose to pursue Pre-Athletic Training SRU 3+2 Health and Physical Education - Physical Activity & Fitness Management and are not accepted into the AT program, then additional coursework is required to complete a first major of Health and Physical Education

- Physical Activity & Fitness Management. Please refer to the Curriculum Guide.

Code	Title	Hours
PAFM Required Core Courses		
Must earn a "C" or better in the following courses		
PE 131	Foundations of Leadership in Physical Activity <sup>1</sup>	3
PE 202	Technology for Wellness <sup>1</sup>	3
PE 231	Strategies for Teaching Physical Activity <sup>1</sup>	3
PE 331	Evidence-Based Physical Activity <sup>1</sup>	3
PE 332	Administration and Management of Physical Activity <sup>1</sup>	3
PE 473	Professionalism, Advocacy and Leadership in Physical Activity <sup>1</sup>	3
Subtotal		18
Required Fitness/Health Courses		
Must earn a "C" or better in the following courses		
PE 242	Physical Health and Fitness Education <sup>1</sup>	3
PE 268	Contemporary Topics in Health <sup>1</sup>	3
PE 335	Science of the Mind-Body Connection <sup>1</sup>	3
BIOL 309		4
Subtotal		13
Required Coursework for PAFM Pre-Athletic Training 3+2 majors		
Coaching Education:		
Must earn a "C" or better in the following courses		
PE 237	Emergency Medical Response <sup>1</sup>	3
PE 270	Psychological and Sociological Bases of Sport <sup>1</sup>	3
PE 306	Conditioning for Athletic Performance <sup>1</sup>	3
PE 369	Philosophy and Psychology of Coaching <sup>1</sup>	3
Subtotal		12
Fitness		
Must earn a "C" or better in the following courses Is this correct?		
PE 238	Applied Principles of Exercise <sup>1</sup>	3
PE 364	Biomechanics of Individuals with Disabilities	3
PE 378	Teaching and Leading of Strength and Resistance Training	3
PE 393	Nutrition for Physical Activity, Exercise, and Health	3
Subtotal		12
Total Hours		55

- <sup>1</sup> Course counts for 50% of Major requirements and Major GPA
- <sup>2</sup> Course counts for 50% of Major requirements
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

ADDITIONAL ATHLETIC TRAINING PREREQUISITE COURSES

Code	Title	Hours
BIOL 110	The Human Body: Fundamentals of Structure and Physiology	3-4

or BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	
CHEM 104	Introduction Chemistry I	3
or CHEM 107	General Chemistry I	
EXSC 250	Medical Terminology	3
or HCAM 250	Medical Terminology for Healthcare Administrators	
PSYC 105	Introduction to Psychology	3

## Athletic Training Graduate Program (Master of Science in Athletic Training)

### Prerequisite Admission Requirements – Pre-Athletic Training SRU 3+2

#### For Application Requirements:

Please refer to Slippery Rock University's Athletic Training Graduate Program. (Master of Science in Athletic Training) website for requirements: [www.sru.edu/AT](http://www.sru.edu/AT) (<http://www.sru.edu/AT/>)

Code	Title	Hours
<b>Pre-Requirement Courses - SRU Athletic Training Graduate Program:</b>		
EXSC 201	Exercise Physiology with Lab	3
or PE 238	Applied Principles of Exercise	
EXSC 202	Biomechanics with Lab	3
or PE 364	Biomechanics of Individuals with Disabilities	
EXSC 250	Medical Terminology	3
or HCAM 250	Medical Terminology for Healthcare Administrators	
EXSC 424	Nutrition and Exercise	3
or PE 393	Nutrition for Physical Activity, Exercise, and Health	
BIOL 110	The Human Body: Fundamentals of Structure and Physiology	3
or BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	
BIOL 209		4
BIOL 309		4
CHEM 104	Introduction Chemistry I	3
or CHEM 107	General Chemistry I	
PHYS 201	Elements of Physics I with Lab	4
PSYC 105	Introduction to Psychology	3
STAT 152	Elementary Statistics I	3

#### Requirements for Pre-Athletic Training SRU 3+2:

If any of these requirements are not met, the 3+2 designation will be removed from the student's record:

1. A 3.0 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Athletic Training SRU 3+2 program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

#### Provision:

Should a Pre-Athletic Training SRU 3+2 student be unsuccessful in completing the 1st three semesters (summer or fall or spring terms) of the Athletic Training Graduate Program and want to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, graduate level AT courses will count toward the completion of his/

her undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the AT program with an earned Bachelor's degree.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

HEALTH & PHYSICAL EDUCATION - PAFM BS (6149/PAFM)

PRE-AT SRU 3+2 (11AT)

This program is effective as of Summer 2022

Revised 03.03.2023

UCC 02.28.2023

## RECOMMENDED FOUR-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
PE 131	Foundations of Leadership in Physical Activity	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
PHYS 201	Elements of Physics I with Lab	4
PSYC 105	Introduction to Psychology	3
SUBJ 139	Foundations of Academic Discovery	3
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
PE 231	Strategies for Teaching Physical Activity	3
PE 242	Physical Health and Fitness Education	3
BIOL 110	The Human Body: Fundamentals of Structure and Physiology (Thematic Thread Option)	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
COMM 200	Civil Discourse: Theory & Practice	3
or PHIL 110	or Ethics and Civil Discourse	
or POLS 235	or Civil Discourse and Democracy	
<b>Hours</b>		<b>18</b>
<b>Second Year</b>		
<b>Fall</b>		
PE 238	Applied Principles of Exercise	3
PE 268	Contemporary Topics in Health	3
PE 270	Psychological and Sociological Bases of Sport	3
BIOL 209		4
Creative & Aesthetic Inquiry (p. 29)		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>19</b>

<b>Spring</b>		
PE 364	Biomechanics of Individuals with Disabilities	3
PE 369	Philosophy and Psychology of Coaching	3
EXSC 250	Medical Terminology (Thematic Thread Option)	3
BIOL 309		4
Humanities Inquiry (p. 29)		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>19</b>

### Third Year

<b>Fall</b>		
PE 202	Technology for Wellness	3
PE 331	Evidence-Based Physical Activity	3
PE 332	Administration and Management of Physical Activity	3
PE 378	Teaching and Leading of Strength and Resistance Training	3
CHEM 104	Introduction Chemistry I	3
Social Science Inquiry (p. 29)		3
<b>Hours</b>		<b>18</b>

<b>Spring</b>		
PE 237	Emergency Medical Response	3
PE 306	Conditioning for Athletic Performance	3
PE 335	Science of the Mind-Body Connection	3
PE 473	Professionalism, Advocacy and Leadership in Physical Activity	3
PE 393	Nutrition for Physical Activity, Exercise, and Health	3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>18</b>
<b>Total Hours**</b>		<b>109</b>

\* Students are encouraged to take ESAP 101 as a Free Elective.

Revised 02.23.2023

# Health and Physical Education, Bachelor of Science in Education (BSED) - Concentration in Physical Activity and Fitness Management / Pre-Athletic Training (SRU) (Traditional)

## PROGRAM LEARNING OUTCOMES

- **Instructional Excellence:** Develop Physical Activity and Fitness Managers who educate and empower individuals to lead active healthy lifestyles.
- **Physical Health and Wellness Competency:** Develop Physical Activity and Fitness Managers who prepare individuals for an active lifestyle through purposeful movement and healthy nutrition.

- **Social, Emotional and Cognitive Wellness:** Develop Physical Activity and Fitness Managers who prepare individuals with strategies to improve cognition, manage stress and positively interact with others.
- **Physical Activity Management in Community and Commercial Settings:** Prepare Physical Activity and Fitness Managers to coordinate and lead comprehensive wellness programs that promote health literacy and physical activity in Community and Commercial Settings.
- **Professional Advocate and Leader:** Develop professionals who model and value health and advocate for quality health and wellness in schools and communities.

## Related Links

Health and Physical Education - Physical Activity and Fitness Management, BSED / Pre-Athletic Training (SRU) (Traditional) Program Page (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/physical-and-health-education/undergraduate-programs/>)

Physical and Health Education Department Page (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/physical-and-health-education/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	44
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	60
	Electives	16

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>	
Select 3 Credits (p. 29)	3

<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
BIOL 209		4
<i>Physical Sciences Inquiry</i>		
PHYS 201	Elements of Physics I with Lab	4
Subtotal		17
<b>Thematic Thread</b>		
Must choose a Thematic Thread with at least 2 AT Prerequisite classes including PSYC 105		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>44</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## MAJOR/CONCENTRATION REQUIREMENTS

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Core Courses</b>		
PE 131	Foundations of Leadership in Physical Activity <sup>1</sup>	3
PE 202	Technology for Wellness <sup>1</sup>	3
PE 231	Strategies for Teaching Physical Activity <sup>1</sup>	3
PE 331	Evidence-Based Physical Activity <sup>1</sup>	3
PE 332	Administration and Management of Physical Activity <sup>1</sup>	3
PE 450	Internship <sup>1</sup>	6
PE 473	Professionalism, Advocacy and Leadership in Physical Activity <sup>1</sup>	3
Subtotal		24
<b>Fitness/Health Courses</b>		
BIOL 309		4
PE 242	Physical Health and Fitness Education <sup>1</sup>	3
PE 268	Contemporary Topics in Health <sup>1</sup>	3
PE 335	Science of the Mind-Body Connection <sup>1</sup>	3
Subtotal		13
<b>Blocks</b>		
Complete the following blocks as a Traditional Pre-AT Student		
<i>Block D: Coaching Education</i>		12
PE 237	Emergency Medical Response	
PE 270	Psychological and Sociological Bases of Sport (Required) <sup>1</sup>	
PE 306	Conditioning for Athletic Performance (Required) <sup>1</sup>	
PE 369	Philosophy and Psychology of Coaching (Required) <sup>1</sup>	
<i>Block E: Fitness</i>		12
PE 238	Applied Principles of Exercise <sup>1</sup>	
PE 364	Biomechanics of Individuals with Disabilities	
PE 378	Teaching and Leading of Strength and Resistance Training	
PE 393	Nutrition for Physical Activity, Exercise, and Health	
Subtotal		24
<b>Total Hours</b>		<b>61</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## ADDITIONAL ATHLETIC TRAINING PREREQUISITE COURSES

Code	Title	Hours
Select one of the following:		3
EXSC 250	Medical Terminology	



HCM 250	Medical Terminology for Healthcare Administrators	
BIOL 110	The Human Body: Fundamentals of Structure and Physiology	3-4
or BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	
CHEM 104	Introduction Chemistry I	3
Subtotal		9-10

## Athletic Training Graduate Program (Master of Science in Athletic Training)

### Prerequisite Admission Requirements

#### For Application Requirements:

Please refer to Slippery Rock University's Athletic Training Graduate Program. (Master of Science in Athletic Training) website for requirements: [www.sru.edu/AT/](http://www.sru.edu/AT/) (<http://www.sru.edu/AT/>)

Code	Title	Hours
<b>Pre-Requisite Courses - SRU Athletic Training Graduate Program:</b>		
EXSC 201	Exercise Physiology with Lab	3
or PE 238	Applied Principles of Exercise	
EXSC 202	Biomechanics with Lab	3
or PE 364	Biomechanics of Individuals with Disabilities	
EXSC 250	Medical Terminology	3
or HCM 250	Medical Terminology for Healthcare Administrators	
EXSC 424	Nutrition and Exercise	3
or PE 393	Nutrition for Physical Activity, Exercise, and Health	
BIOL 110	The Human Body: Fundamentals of Structure and Physiology	3
or BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	
BIOL 209		
BIOL 309		
CHEM 104	Introduction Chemistry I	3
or CHEM 107	General Chemistry I	
PHYS 201	Elements of Physics I with Lab	4
PSYC 105	Introduction to Psychology	3
STAT 152	Elementary Statistics I	3

## CO-CURRICULAR AND EXPERIENTIAL LEARNING

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. Student-faculty research
3. Student leadership development
4. Service-learning classes
5. Career education and development
6. Internship
7. Volunteering

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Health and Physical Education - BSED (1158) Concentration in Physical Activity and Fitness Management (PAFM) Pre-Athletic Training 3+2 (11AT) This program is effective as of Summer 2022 Revised 02.14.2023 UCC 04.19.2022

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
PE 131	Foundations of Leadership in Physical Activity	3
ESAP 101	FYRST Seminar	1
ENGL 102	Critical Writing	3
PHYS 201	Elements of Physics I with Lab	4
PSYC 105	Introduction to Psychology	3
SUBJ 139	University Seminar	3
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
PE 231	Strategies for Teaching Physical Activity	3
PE 242	Physical Health and Fitness Education	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
PE 238	Applied Principles of Exercise	3
PE 268	Contemporary Topics in Health	3
PE 270	Psychological and Sociological Bases of Sport	3
BIOL 209		4
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
PE 364	Biomechanics of Individuals with Disabilities	3
PE 369	Philosophy and Psychology of Coaching	3
EXSC 250	Medical Terminology	3
BIOL 309		4
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>

**Third Year****Fall**

PE 202	Technology for Wellness	3
PE 331	Evidence-Based Physical Activity	3
PE 378	Teaching and Leading of Strength and Resistance Training	3
CHEM 104	Introduction Chemistry I	3
Social Science Inquiry (p. 29)		3
Thematic Thread Requirement (p. 29)		3

**Hours** **18**

**Spring**

PE 237	Emergency Medical Response	3
PE 306	Conditioning for Athletic Performance	3
PE 335	Science of the Mind-Body Connection	3
PE 393	Nutrition for Physical Activity, Exercise, and Health	3
Thematic Thread Requirement (p. 29)		3

**Hours** **15**

**Fourth Year****Fall**

PE 332	Administration and Management of Physical Activity	3
PE 473	Professionalism, Advocacy and Leadership in Physical Activity	3
BIOL 110	The Human Body: Fundamentals of Structure and Physiology	3
Thematic Thread Requirement (p. 29)		3
Elective <sup>1</sup>		5

**Hours** **17**

**Spring**

PE 450	Internship <sup>1</sup>	6-12
<b>Hours</b>		<b>6-12</b>
<b>Total Hours**</b>		<b>120-126</b>

<sup>1</sup> Students can take additional credits in PE 450 or elective coursework to meet the 120 credit hour minimum.

## Health and Physical Education, Bachelor of Science in Education (BSED) - Concentration in Physical Activity and Fitness Management / Pre-Occupational Therapy (SRU) (3+3)

The Physical Education - Physical Activity and Fitness Management concentration will prepare professionals to plan, implement, and evaluate physical activity programs in corporate, community, and non-profit settings. The physical activity and fitness management concentration has intellectual value in academia while addressing emerging regional and national employment trends, student interests and preferences, and community need. The uniqueness of this concentration centers around

a personal preparation core combined with students preferred choice of two of five well-established and emerging specialty areas.

The proposed Health & Physical Education (HPE)/Physical Activity & Fitness Management Pre-Occupational Therapy 3+3 (PAFM Pre- OT 3+3) program is designed to give students an opportunity to enrich their undergraduate education with an intensive program in PAFM and facilitate their entry into the Doctor of Occupational Therapy (OT) at SRU. The course work is tailored to meet the needs of the student both as an HPE/PAFM major and to prepare them for a Doctor of Occupational Therapy program.

## PROGRAM LEARNING OUTCOMES

- **Instructional Excellence:** Develop Physical Activity and Fitness Managers who educate and empower individuals to lead active healthy lifestyles. (SRU 1, 2, 3)
- **Physical Health and Wellness Competency:** Develop Physical Activity and Fitness Managers who prepare individuals for an active lifestyle through purposeful movement and healthy nutrition. (SRU 1, 2, 3)
- **Social, Emotional and Cognitive Wellness:** Develop Physical Activity and Fitness Managers who prepare individuals with strategies to improve cognition, manage stress and positively interact with others. (SRU 5, 8)
- **Physical Activity Management in Community and Commercial Settings:** Prepare Physical Activity and Fitness Managers to coordinate and lead comprehensive wellness programs that promote health literacy and physical activity in Community and Commercial Settings. (SRU 7,9)
- **Professional Advocate and Leader:** Develop professionals who model and value health and advocate for quality health and wellness in schools and communities. (SRU 7, 9)

## RELATED LINKS

Health and Physical Education - Physical Activity and Fitness Management, BSED / Pre-Occupational Therapy (SRU) (3+3) Program Pag (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/physical-and-health-education/undergraduate-programs/>)e

Physical and Health Education Department Page (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/physical-and-health-education/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT – HEALTH & PHYSICAL EDUCATION

#### 1<sup>st</sup> Major: Health & Physical Education

- Overall GPA: 2.00 or higher

#### 2<sup>nd</sup> Major: Pre-OT SRU 3+3 Health & Physical Education

- Overall GPA: 3.00 or higher

## SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	43
	Other Basic Requirements	0-3
	Computer Competency	0-3

Major Requirements	55
Electives	22

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the 1<sup>st</sup> year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.

## ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
BIOL 209		4
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		16
<b>Thematic Thread</b>		
Must choose a Thematic Thread with at least 2 OT Prerequisite classes including PSYC 105		
Select 12 Credits (p. 29) <sup>2,3</sup>		12
<b>Total Hours</b>		<b>43</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

<sup>3</sup> Additional Occupational Therapy prerequisite courses may be fulfilled in a Thematic Thread.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## MAJOR REQUIREMENTS

- If you choose to pursue Pre-Occupational Therapy SRU 3+3 Health & Physical Education - Physical Activity & Fitness Management (HPE-PAFM) and are not accepted into the OTD program, then additional coursework is required to complete a first major in Health & Physical Education - Physical Activity in Fitness Management. Please refer to the curriculum guide.

Code	Title	Hours
<b>Required Basic Courses</b>		
Must earn a "C" or better in the following courses		
PE 131	Foundations of Leadership in Physical Activity <sup>1</sup>	3
PE 202	Technology for Wellness <sup>1</sup>	3
PE 231	Strategies for Teaching Physical Activity <sup>1</sup>	3
PE 331	Evidence-Based Physical Activity <sup>1</sup>	3
PE 332	Administration and Management of Physical Activity <sup>1</sup>	3
PE 473	Professionalism, Advocacy and Leadership in Physical Activity <sup>1</sup>	3
Subtotal		18
<b>Required Fitness/Health Coursework</b>		
Must earn a "C" or better in the following courses		
PE 242	Physical Health and Fitness Education <sup>1</sup>	3
PE 268	Contemporary Topics in Health <sup>1</sup>	3
PE 335	Science of the Mind-Body Connection <sup>1</sup>	3
BIOL 309		4
Subtotal		13
<b>Blocks</b>		
Select two of the following blocks		24

**Block A: Adapted Physical Activity**

PE 227	Introduction to Adapted Physical Activity
PE 353	Adapted Physical Activity and Health Through the Lifespan
PE 460	Program Design in Adapted Physical Activity
Select 3 credits from the following:	
PE 262	Adapted Aquatics <sup>1</sup>
PE 266	Disability Sport in the 21st Century: A Global Perspective <sup>1</sup>

**Block B: Aquatics**

PE 107	Aquatic Fundamentals
PE 348	Aquatic Leadership
PE 446	Water Safety Instruction
Select 4 credits from the following:	
PE 123	Stand-Up Paddle Boarding
PE 189	Basic Canoeing
PE 236	Introduction to Kayaking
PE 237	Emergency Medical Response
PE 262	Adapted Aquatics
PE 363	Lifeguarding Instructor
PE 345	Teaching and Coaching of Water Polo
PE 349	Skin and Scuba Diving
PE 363	Lifeguarding Instructor

**Block C: Outdoor Adventure Fitness**

PE 241	Outdoor Pursuits
PE 334	Applied Methodologies in Adventure
Select 6 credits from the following:	
PE 123	Stand-Up Paddle Boarding
PE 125	Bicycling
PE 182	Introduction to Rock Climbing
PE 186	Cross Country Skiing and Snowshoeing
PE 236	Introduction to Kayaking
PE 272	Enhancing Fitness through Running and Walking
PE 276	Skate-Based Action Sports
PE 349	Skin and Scuba Diving

**Block D: Coaching Education**

PE 270	Psychological and Sociological Bases of Sport
PE 306	Conditioning for Athletic Performance
PE 369	Philosophy and Psychology of Coaching
Select 3 credits from the following:	
PE 230	Teaching and Coaching of Track & Field
PE 237	Emergency Medical Response
PE 238	Applied Principles of Exercise
PE 266	Disability Sport in the 21st Century: A Global Perspective
PE 301	Sports Officiating
PE 338	Teaching and Leading Group Exercise
PE 356	Net/Wall Activities and Games
PE 358	Lifetime/Leisure Activities and Games

PE 378	Teaching and Leading of Strength and Resistance Training
PE 393	Nutrition for Physical Activity, Exercise, and Health

**Block E: Fitness**

PE 238	Applied Principles of Exercise
PE 393	Nutrition for Physical Activity, Exercise, and Health
PE 364	Biomechanics of Individuals with Disabilities
Select 6 credits from the following:	
PE 338	Teaching and Leading Group Exercise
PE 378	Teaching and Leading of Strength and Resistance Training
PE 379	Fitness Management

<b>Total Hours</b>	<b>55</b>
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<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> Course counts for 50% of Major requirements

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## ADDITIONAL OCCUPATIONAL THERAPY PREREQUISITE COURSES

Code	Title	Hours
EXSC 250	Medical Terminology	3
or HCAM 250	Medical Terminology for Healthcare Administrators	
INDP 106	Race and Ethnic Diversity in the USA	3
or INDP 202	Introduction to Anthropology	
or INDP 310	Cultural Area Studies	
or INDP 321	Minority Groups	
or SOWK 105	Human Diversity	
INDP 318	Research Methods in Interdisciplinary Studies	3
PSYC 105	Introduction to Psychology	3
PSYC 244	Developmental Psychology	3
PSYC 276	Introduction to Abnormal Psychology	3
<b>Total Hours</b>		<b>18</b>

## Doctor of Occupational Therapy (OTD) Prerequisite Admission Requirements – Pre-Occupational Therapy SRU 3+3

### For Application Requirements

Please refer to Slippery Rock University's Occupational Therapy Studies (Master of Science in Occupational Therapy Studies) website for requirements: <http://www.sru.edu/OT> (<http://www.sru.edu/OT/>)

### Rock Studies 2

Code	Title	Hours
<b>Prerequisite Courses - SRU Occupational Therapy</b>		
BIOL 209		4
BIOL 309		4
EXSC 250	Medical Terminology	3

or HCAM 250	Medical Terminology for Healthcare Administrators	
PHYS 201	Elements of Physics I with Lab	4
or PE 364	Biomechanics of Individuals with Disabilities	
STAT 152	Elementary Statistics I	3
PSYC 105	Introduction to Psychology	3
PSYC 244	Developmental Psychology	3
PSYC 276	Introduction to Abnormal Psychology	3
Anthropology or Sociology <sup>1</sup>		3
INDP 106	Race and Ethnic Diversity in the USA	
INDP 202	Introduction to Anthropology	
INDP 211	Biological Anthropology	
INDP 309	Health and Society	
INDP 310	Cultural Area Studies	
INDP 321	Minority Groups	
INDP 324	The Family	
INDP 326	Society, Culture and Self	
INDP 339	Gender Roles and Society	
INDP 342	Sociology of Aging	
RCTH 120	Disability, Community Inclusion, and Diversity	
SOWK 105	Human Diversity	
Research Methods - Select One: <sup>1</sup>		3
EXSC 300	Research Methods in Exercise Science	
HCAM 499	Health Care Theory and Research Capstone Seminar	
INDP 318	Research Methods in Interdisciplinary Studies	
PSYC 231/232	Psychological Science I: Research Methods	
SOWK 318	Research Methods	
<b>Total Hours</b>		<b>33</b>

<sup>1</sup> Select one course. See *My Rock Audit* for specific courses.

### Pre-Occupational Therapy SRU 3+3

If any of these requirements are not met, the 3+3 designation will be removed from the student's record:

1. A 3.0 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Occupational Therapy SRU 3+3 program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

### Provision

Should a Pre-Occupational Therapy SRU 3+3 student be unsuccessful in completing the 1<sup>st</sup> two semesters (summer or fall) of the Occupational Therapy Program and wants to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, Occupational Therapy courses will count toward the completion of his/her undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the Doctor of Occupational Therapy Program with an earned Bachelor's degree.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled

SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

HEALTH & PHYSICAL EDUCATION - PHYSICAL ACTIVITY & FITNESS MANAGEMENT BS (1158/PAFM)

PRE-OT SRU 3+3 (110T)

This program is effective as of Summer 2022

Revised 03.03.2023

UCC 02.28.2023

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
PE 131	Foundations of Leadership in Physical Activity	3
PE 268	Contemporary Topics in Health	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery	3
ENGL 102	Critical Writing	3
PSYC 105	Introduction to Psychology (Thematic Thread Requirement))	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
PE 231	Strategies for Teaching Physical Activity	3
PE 242	Physical Health and Fitness Education	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Specialty Area 1-1		3
<b>Hours</b>		<b>18</b>
<b>Second Year</b>		
<b>Fall</b>		
PE 202	Technology for Wellness	3
Specialty Area 1-2		3
PSYC 244	Developmental Psychology (Thematic Thread Option)	3
BIOL 209		4
SCI 102	Understanding the Physical World	3
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>19</b>
<b>Spring</b>		
PE 364	Biomechanics of Individuals with Disabilities (Specialty Area 1-3)	3
Specialty Area 2-1		3
EXSC 250	Medical Terminology (Thematic Thread Option)	3



BIOL 309	4
Humanities Inquiry (p. 29)	3
Thematic Thread Requirement (p. 29)	3
<b>Hours</b>	<b>19</b>

**Third Year****Fall**

PE 331	Evidence-Based Physical Activity	3
PE 332	Administration and Management of Physical Activity	3
Specialty Area 1-4		3
Specialty Area 2-2		3
Specialty Area 2-3		3
INDP 201 or INDP 202	Principles of Sociology (Thematic Thread Option) or Introduction to Anthropology	3
<b>Hours</b>		<b>18</b>

**Spring**

PE 335	Science of the Mind-Body Connection	3
PE 473	Professionalism, Advocacy and Leadership in Physical Activity	3
Specialty Area 2-4		3
INDP 318	Research Methods in Interdisciplinary Studies	3
PSYC 276	Introduction to Abnormal Psychology	3
Social Science Inquiry (p. 29)		3
<b>Hours</b>		<b>18</b>
<b>Total Hours**</b>		<b>108</b>

\* Students are encouraged to take ESAP 101 as a Free Elective.

Revised 2.23.2023

## Health and Physical Education, Bachelor of Science in Education (BSED) - Concentration in Physical Activity and Fitness Management / Pre-Occupational Therapy (SRU) (Traditional)

### PROGRAM LEARNING OUTCOMES

- **Instructional Excellence:** Develop Physical Activity and Fitness Managers who educate and empower individuals to lead active healthy lifestyles.
- **Physical Health and Wellness Competency:** Develop Physical Activity and Fitness Managers who prepare individuals for an active lifestyle through purposeful movement and healthy nutrition.
- **Social, Emotional and Cognitive Wellness:** Develop Physical Activity and Fitness Managers who prepare individuals with strategies to improve cognition, manage stress and positively interact with others.
- **Physical Activity Management in Community and Commercial Settings:** Prepare Physical Activity and Fitness Managers to coordinate and lead comprehensive wellness programs that promote

health literacy and physical activity in Community and Commercial Settings.

- **Professional Advocate and Leader:** Develop professionals who model and value health and advocate for quality health and wellness in schools and communities.

### RELATED LINKS

Health and Physical Education - Physical Activity and Fitness Management, BSED / Pre-Occupational Therapy (SRU) (Traditional) Program Page (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/physical-and-health-education/undergraduate-programs/>)

Physical and Health Education Department Page (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/physical-and-health-education/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

### CURRICULUM GUIDE

#### GPA REQUIREMENT

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

#### SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	43
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	61
	Electives	16

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the 1<sup>st</sup> year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.

#### ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

#### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3

<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
BIOL 209		4
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		16
<b>Thematic Thread</b>		
Must choose a Thematic Thread with at least 2 OT Prerequisite classes including PSYC 105		
Select 12 Credits (p. 29) <sup>2,3</sup>		12
<b>Total Hours</b>		<b>43</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

<sup>3</sup> Additional Occupational Therapy prerequisite courses may be fulfilled in a Thematic Thread.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## MAJOR REQUIREMENTS

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Basic Courses</b>		
Must earn a "C" or better in the following courses		
PE 131	Foundations of Leadership in Physical Activity <sup>1</sup>	3
PE 202	Technology for Wellness <sup>1</sup>	3
PE 231	Strategies for Teaching Physical Activity <sup>1</sup>	3
PE 331	Evidence-Based Physical Activity <sup>1</sup>	3
PE 332	Administration and Management of Physical Activity <sup>1</sup>	3
PE 450	Internship	6
PE 473	Professionalism, Advocacy and Leadership in Physical Activity <sup>1</sup>	3
Subtotal		24
<b>Required Fitness/Health Coursework</b>		
Must earn a "C" or better in the following courses		
BIOL 309		4
PE 242	Physical Health and Fitness Education <sup>1</sup>	3
PE 268	Contemporary Topics in Health <sup>1</sup>	3
PE 335	Science of the Mind-Body Connection <sup>1</sup>	3
Subtotal		13
<b>Blocks</b>		
Select two of the following blocks:		
<i>Block A: Adapted Physical Activity</i>		
PE 227	Introduction to Adapted Physical Activity	
PE 353	Adapted Physical Activity and Health Through the Lifespan	
PE 460	Program Design in Adapted Physical Activity	
Select 3 credits from the following:		
PE 262	Adapted Aquatics	
PE 266	Disability Sport in the 21st Century: A Global Perspective	
<i>Block B: Aquatics</i>		
PE 107	Aquatic Fundamentals	
PE 348	Aquatic Leadership	
PE 446	Water Safety Instruction	
Select 4 credits from the following:		
PE 123	Stand-Up Paddle Boarding	
PE 189	Basic Canoeing	
PE 236	Introduction to Kayaking	
PE 237	Emergency Medical Response	
PE 262	Adapted Aquatics	
PE 363	Lifeguarding Instructor	
PE 345	Teaching and Coaching of Water Polo	
PE 349	Skin and Scuba Diving	
PE 363	Lifeguarding Instructor	
<i>Block C: Outdoor Adventure Fitness</i>		
PE 241	Outdoor Pursuits	

PE 334	Applied Methodologies in Adventure	
Select 6 credits from the following:		
PE 123	Stand-Up Paddle Boarding	
PE 125	Bicycling	
PE 182	Introduction to Rock Climbing	
PE 186	Cross Country Skiing and Snowshoeing	
PE 236	Introduction to Kayaking	
PE 272	Enhancing Fitness through Running and Walking	
PE 276	Skate-Based Action Sports	
PE 349	Skin and Scuba Diving	
<b>Block D: Coaching Education</b>		<b>12</b>
PE 237	Emergency Medical Response	
PE 270	Psychological and Sociological Bases of Sport	
PE 306	Conditioning for Athletic Performance	
PE 369	Philosophy and Psychology of Coaching	
<b>Block E: Fitness</b>		<b>12</b>
PE 238	Applied Principles of Exercise	
PE 364	Biomechanics of Individuals with Disabilities	
PE 378	Teaching and Leading of Strength and Resistance Training	
PE 393	Nutrition for Physical Activity, Exercise, and Health	
<b>Total Hours</b>		<b>61</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> Course counts for 50% of Major requirements

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## ADDITIONAL OCCUPATIONAL THERAPY PREREQUISITE COURSES

### Doctor of Occupational Therapy (OTD) Prerequisite Admission Requirements

#### For Application Requirements

Please refer to Slippery Rock University's Occupational Therapy Studies (Master of Science in Occupational Therapy Studies) website for requirements: <http://www.sru.edu/OT> (<http://www.sru.edu/OT/>)

#### Rock Studies 2

Code	Title	Hours
<b>Prerequisite Courses - SRU Occupational Therapy</b>		
BIOL 209		4
BIOL 309		4
EXSC 250 or HCAM 250	Medical Terminology Medical Terminology for Healthcare Administrators	3
PHYS 201 or PE 364	Elements of Physics I with Lab Biomechanics of Individuals with Disabilities	4
STAT 152	Elementary Statistics I	3
PSYC 105	Introduction to Psychology	3
PSYC 244	Developmental Psychology	3

PSYC 276	Introduction to Abnormal Psychology	3
Research Methods - Select One: <sup>1</sup>		3
EXSC 300	Research Methods in Exercise Science	
HCAM 499	Health Care Theory and Research Capstone Seminar	
INDP 318	Research Methods in Interdisciplinary Studies	
PSYC 231 & PSYC 232	Psychological Science I: Research Methods and Psychological Science II: Statistical Applications	
SOWK 318	Research Methods	
Anthropology or Sociology - Select One: <sup>1</sup>		3
INDP 106	Race and Ethnic Diversity in the USA	
INDP 202	Introduction to Anthropology	
INDP 211	Biological Anthropology	
INDP 309	Health and Society	
INDP 310	Cultural Area Studies	
INDP 321	Minority Groups	
INDP 324	The Family	
INDP 326	Society, Culture and Self	
INDP 339	Gender Roles and Society	
INDP 342	Sociology of Aging	
RCTH 120	Disability, Community Inclusion, and Diversity	
SOWK 105	Human Diversity	
<b>Total Hours</b>		<b>33</b>

<sup>1</sup> Select one course. See *My Rock Audit* for specific courses.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

HEALTH & PHYSICAL EDUCATION - PHYSICAL ACTIVITY & FITNESS  
MANAGEMENT BS (1158/PAFM) PRE-OT SRU Traditional This program is effective as of Summer 2022 Revised 02.15.2023 UCC 04.19.2022

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
PE 131	Foundations of Leadership in Physical Activity	3
PE 268	Contemporary Topics in Health	3
ESAP 101	FYRST Seminar	1
SUBJ 139	University Seminar	3
ENGL 102	Critical Writing	3
PSYC 105	Introduction to Psychology	3
<b>Hours</b>		<b>16</b>

<b>Spring</b>		
PE 231	Strategies for Teaching Physical Activity	3
PE 242	Physical Health and Fitness Education	3
ENGL 102	Critical Writing	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
<b>Hours</b>		<b>15</b>

**Second Year**

<b>Fall</b>		
SCI 102	Understanding the Physical World	3
Specialty Area 1-1		3
PSYC 244	Developmental Psychology	3
BIOL 209		4
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>

<b>Spring</b>		
PE 364	Biomechanics of Individuals with Disabilities (Specialty Area 2-1)	3
Specialty Area 1-2		3
EXSC 250	Medical Terminology	3
BIOL 309		4
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>

**Third Year**

<b>Fall</b>		
PE 202	Technology for Wellness	3
PE 331	Evidence-Based Physical Activity	3
Specialty Area 1-3		3
INDP 318	Research Methods in Interdisciplinary Studies	3
INDP 201 or INDP 202	Principles of Sociology or Introduction to Anthropology	3
Social Science Inquiry (p. 29)		3
<b>Hours</b>		<b>18</b>

<b>Spring</b>		
PE 335	Science of the Mind-Body Connection	3
Specialty Area 1-4		3
Specialty Area 2-2		3
PSYC 276	Introduction to Abnormal Psychology	3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>

**Fourth Year**

<b>Fall</b>		
PE 332	Administration and Management of Physical Activity	3
PE 473	Professionalism, Advocacy and Leadership in Physical Activity	3
Specialty Area 2-3		3
Specialty Area 2-4		3
Thematic Thread Requirement (p. 29)		3

Electives <sup>1</sup>		3
<b>Hours</b>		<b>18</b>
<b>Spring</b>		
PE 450	Internship <sup>1</sup>	6-12
<b>Hours</b>		<b>6-12</b>
<b>Total Hours**</b>		<b>120-126</b>

<sup>1</sup> Students can take additional credits in PE 450 (<https://catalog.sru.edu/search/?P=PE%20450>) or elective coursework to meet the 120 credit hour minimum.

Revised 2.23.2023

## Health and Physical Education, Bachelor of Science in Education (BSED) - Concentration in School Wellness Education

Slippery Rock University's Health and Physical Teacher Education program prepares you to help students maintain healthy lifestyles both at school and outside the classroom. Do you want to inspire young people to learn healthy habits that decrease their chances of long-term health problems? Are you passionate about motivating children to start lifelong behaviors that lead them to healthy futures? Look no further than SRU's School Wellness Education concentration.

Majors in this program are awarded a Bachelor's in Education with a major in Health and Physical Education and a concentration in School Wellness. An educator with this degree can make all the difference in students' lives, as today's K-12 children are spending less time outside and are living increasingly sedentary lifestyles.

All candidates completing this program and student teaching are eligible to receive Pennsylvania certification after achieving a passing or qualifying score on Pennsylvania Department of Education required exam(s). If you are interested in teaching in another state, please contact the Department of Education in that state.

## Program Learning Outcomes

- **Excellent Teaching:** Develop teachers who educate and empower individuals to lead active healthy lifestyles.
- **Physical Health and Wellness:** Develop teachers who prepare individuals for an active lifestyle through purposeful movement and healthy nutrition.
- **Social, Emotional and Cognitive Wellness:** Develop teachers who prepare individuals with strategies to improve cognition, manage stress and positively interact with others.
- **School to Community Health and Wellness:** Prepare teachers to coordinate and lead comprehensive wellness programs that promote health literacy and physical activity.
- **Professional Advocate and Leader:** Develop professionals who model and value health and advocate for quality health and wellness in schools and communities.

## Related Links

Health and Physical Education - School Wellness Education, BSED Program Page (<https://www.sru.edu/academics/majors-and-minors/health-and-physical-teacher-education-school-wellness-education/>)

Physical and Health Education Department Page (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/physical-and-health-education/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

GPA must be 2.8 or higher for Teacher Candidacy.

A 3.0 GPA and passing subject area assessment (PECT) or a 2.8 GPA and a qualifying passing subject area assessment (PECT) score (as determined by PDE) is required for certification.

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	84-87
	Electives	3

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15

### Additional Rock Studies 2 Requirements (12 credits)

CDEV 248	Human Development and Education	3
STAT 152	Elementary Statistics I	3
SEFE 326	ELL Strategies and Practice	3
SEFE 342	Educational Psychology for Diverse Learners	3

**Total Hours** **42**

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.
- <sup>2</sup> From at least 3 categories; no more than 6 credits from one department; 6 credits must be 300-level or above.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

### Major/Concentration Requirements

- 42 major credits must be taken at SRU or PASSHE
- 42 major credits must be taken at the 300 level or above
- Six (6) Credits of Math (113 or higher) Required Prior to Admission to Teacher Candidacy: Math Requirement for BS in Education and Human Development requirements must be taken as part of, or in addition to rock studies 2/thematic thread for degree completion.
  - STAT 152
  - MATH 113, MATH 115, MATH 117, MATH 118, MATH 122, MATH 123, MATH 125, MATH 131, MATH 210, MATH 225
  - CDEV 248



Code	Title	Hours
<b>Pillar #1 – Teaching Excellence</b>		
PE 152	Principles of School Wellness I <sup>1,2</sup>	3
PE 253	Principles of School Wellness II <sup>1,2</sup>	3
PE 452	Elementary Strategies for School Wellness	6
PE 462	Secondary Strategies in School Wellness <sup>1,2</sup>	6
Subtotal		18
<b>Pillar #2 – Physical Health &amp; Wellness</b>		
PE 107	Aquatic Fundamentals <sup>1</sup>	3
PE 310	Elementary School Wellness Skills and Fitness Activities <sup>1,2</sup>	3
PE 311	Middle School Wellness Skills and Fitness Activities <sup>1,2</sup>	3
PE 312	Secondary School Wellness Skills and Fitness Activities <sup>1,2</sup>	3
PE 328	School Nutrition and Wellness <sup>1,2</sup>	3
PE 383	Motor Development and Learning <sup>1</sup>	3
Subtotal		18
<b>Pillar #3 – Social &amp; Emotional Health &amp; Wellness</b>		
PE 241	Outdoor Pursuits <sup>1</sup>	3
PE 258	Social & Emotional Wellness <sup>1</sup>	3
PE 360	Anatomical and Physiological Basis of Physical Activity/Lab <sup>1</sup>	3
SEFE 326	ELL Strategies and Practice <sup>1</sup>	3
SEFE 342	Educational Psychology for Diverse Learners <sup>1</sup>	3
Subtotal		15
<b>Pillar #4 – School to Community Health &amp; Wellness</b>		
PE 191	Foundations of School Wellness <sup>1</sup>	3
PE 227	Introduction to Adapted Physical Activity <sup>1</sup>	3
PE 243	Educational Movement in Health & Wellness <sup>1</sup>	3
PE 268	Contemporary Topics in Health <sup>1</sup>	3
Subtotal		12
<b>Pillar #5 – Professional Advocacy &amp; Leadership in Health &amp; Wellness</b>		
PE 202	Technology for Wellness <sup>1</sup>	3
PE 472	School Wellness Assessment and Promotion <sup>1,2</sup>	3
PE 473	Professionalism, Advocacy and Leadership in Physical Activity <sup>1</sup>	3
PE 455	Student Teaching - Physical Education <sup>1,2</sup>	12
Subtotal		21
<b>First Aid Competency</b>		
Select one of the following:		0-3
CPR and First Aid & Safety Certifications		
SAFE 205	First Aid and Safety	
<b>Total Hours</b>		<b>84-87</b>

<sup>1</sup> Course counts for 50% of Major, but not for Major GPA

<sup>2</sup> Course must be taken in sequence within block and a 'C' or better is required. Course required for Acceptance into Teacher Candidacy.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Recommended Electives

Code	Title	Hours
PE 115	Yoga and Well-Being	3
PE 334	Applied Methodologies in Adventure	3
PE 338	Teaching and Leading Group Exercise	3
PE 378	Teaching and Leading of Strength and Resistance Training	3
PE 446	Water Safety Instruction	3
HLTH 316	Human Sexuality	3

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. Student-faculty research
3. Student leadership development
4. Service-learning classes
5. Career education and development
6. Internship
7. Volunteering

## Important Information

### Prerequisites for Admission to Teacher Candidacy

Code	Title	Hours
<b>Basic Courses</b>		
PE 152	Principles of School Wellness I	3
ENGL 102	Critical Writing	3
Select one of the following:		3
ENGL 104	Critical Reading	
ENGL 220	Introduction to Literary and Cultural Studies	
<b>Math Requirement</b>		
Select six credits from the following:		3
MATH 113	Mathematics as a Liberal Art	
MATH 115	Financial Mathematics	
MATH 117	Quantitative Reasoning	
MATH 122	Finite Mathematics with Matrices	
MATH 123	Introduction to Applied Calculus	
MATH 125	Precalculus	
MATH 131	Discrete Mathematics	
MATH 210	Mathematics for Elementary Teachers I	
MATH 225	Calculus I	
MATH 230	Calculus II	
MATH 235	Foundations of Mathematical Proof	
MATH 310	Mathematics for Elementary Teachers II	
STAT 152	Elementary Statistics I	

STAT 252	Introduction to Statistical Modeling
<b>Total Hours</b>	<b>12</b>

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Health & Physical Education (BSED) (1158)

Concentration in School Wellness Educ. (SWED)

This program is effective as of Fall 2019

UCC 03.05.20

Revised 08.03.2021

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
PE 107	Aquatic Fundamentals <sup>1</sup>	3
PE 191	Foundations of School Wellness	3
ENGL 102	Critical Writing <sup>1</sup>	3
MATH 117	Quantitative Reasoning	3
SUBJ 139	Foundations of Academic Discovery <sup>2</sup>	3
ESAP 101	FIRST Seminar *	1
<b>Hours</b>		<b>16</b>

<b>Spring</b>		
PE 152	Principles of School Wellness I <sup>1</sup>	3
PE 227	Introduction to Adapted Physical Activity	3
ENGL 104	Critical Reading <sup>1</sup>	3
STAT 152	Elementary Statistics I	3
Rock Studies linkurl^/undergraduate/rock-studies/rock-studies-quick-guide/^Rock Studies 2 Requirements		0-3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
<b>Hours</b>		<b>15-18</b>

<b>Second Year</b>		
<b>Fall</b>		
PE 202	Technology for Wellness	3
PE 383	Motor Development and Learning	3
PE 268	Contemporary Topics in Health	3
Creative & Aesthetic Inquiry (p. 29)		3
Humanities Inquiry (p. 29)		3
Elective/Minor		0-3
<b>Hours</b>		<b>15-18</b>

<b>Spring</b>		
PE 243	Educational Movement in Health & Wellness	3
PE 258	Social & Emotional Wellness	3
PE 360	Anatomical and Physiological Basis of Physical Activity/Lab	3
SCI 101	Science of Life	3
Social Science Inquiry (p. 29)		3
Elective/Minor		0-3
<b>Hours</b>		<b>15-18</b>

<b>Third Year</b>		
<b>Fall</b>		
<b>Teacher Candidacy</b>		
PE 310	Elementary School Wellness Skills and Fitness Activities	3
PE 328	School Nutrition and Wellness	3
PE 253	Principles of School Wellness II	3
PE 241	Outdoor Pursuits	3
SEFE 326	ELL Strategies and Practice	3
SCI 102	Understanding the Physical World	3
<b>Hours</b>		<b>18</b>

<b>Spring</b>		
PE 311	Middle School Wellness Skills and Fitness Activities	3
PE 312	Secondary School Wellness Skills and Fitness Activities	3
PE 452	Elementary Strategies for School Wellness	6
SEFE 342	Educational Psychology for Diverse Learners	3
Elective/Minor		3
<b>Hours</b>		<b>18</b>

<b>Fourth Year</b>		
<b>Fall</b>		
PE 462	Secondary Strategies in School Wellness	6
PE 472	School Wellness Assessment and Promotion	3
PE 473	Professionalism, Advocacy and Leadership in Physical Activity	3
Rock Studies 2/Minor		3
<b>Hours</b>		<b>15</b>

<b>Spring</b>		
PE 455	Student Teaching - Physical Education	12
<b>Hours</b>		<b>12</b>
<b>Total Hours**</b>		<b>124-133</b>

<sup>1</sup> Course requires a grade of C or better

<sup>2</sup> Course offered in multiple subjects; cannot take course in first major subject

\* Students are encouraged to take ESAP 101 as a Free Elective.

Major Code: 1158

Concentration Code: SWED

Revised 01.18.2021

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

## Living Well, Certificate

The Living Well certificate will provide the opportunity for students at Slippery Rock University to gain knowledge in how and why to live a healthy and active life. The importance of individuals engaging in healthy lifestyles along with the consequences of those who do not has been documented in the past five years. Students will understand the impact these consequences at both individual and societal levels.

To access Certificate Requirements, please view the Curriculum Guide tab.

## Related Links

Living Well, Certificate Program Page (<https://www.sru.edu/academics/certificates/living-well-certificate/>)

Physical and Health Education Department Page (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/physical-and-health-education/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirements

Certificate GPA: 2.0 or higher

### Certificate Requirements

Code	Title	Hours
<b>Required Courses</b>		
EXSC 230	Stress Management	3
HLTH 314	Nutrition and Health	3
PE 342	Wellness through Movement	3
PE 430	Living Well	3
<b>Total Hours</b>		<b>12</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

CERTIFICATE IN LIVING WELL (1157)

This program is effective as of Fall 2016.

Revised 07.27.2021

## Physical Education - Coaching, Minor

Great coaches bring out the best in their athletes. Whether it's perfecting a technique or learning good sportsmanship, coaches lead their team to victories on and off the field. The minor in Coaching at SRU prepares coaches to make ethical decisions related to development, implementation, and evaluation of athletic experiences.

### WHY CHOOSE COACHING?

If you have a passion for sports, a knack for connecting with others, and the spark to lead, the minor in Coaching will prepare you for an exciting career. As organized sports continue to grow, the need for qualified and competent coaches is rising. When you minor in Coaching at SRU, you'll gain the skills you need to provide the best experience and opportunities for athletes of all ages and levels.

### WHAT WILL YOU LEARN?

You will be prepared to coach athletes of all ages with the skills you gain through this minor. Courses in the philosophy and psychology of coaching, psychological and sociological bases of sport, motor development and learning, and sports officiating will give you the fundamentals you will need to be an effective coach.

You will also complete three practicum experiences where you will have hands-on experience working with three different athletic teams of their choice. Opportunities range from coaching at local YMCAs, youth and community sports, high school teams, college programs, and even adult leagues. You can gain experience beyond traditional team sports like baseball, softball, basketball, football, and soccer. Options also include rugby, deck hockey, ice hockey, tennis, wrestling and gymnastics, to name a few. Your practicum experiences can be individually structured based on your interests and experiences.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Coaching, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/coaching-minor/>)

Physical and Health Education Department Page (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/physical-and-health-education/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirements

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU

- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Coaching Minor Required Courses</b>		
PE 270	Psychological and Sociological Bases of Sport	3
PE 301	Sports Officiating	3
PE 369	Philosophy and Psychology of Coaching	3
PE 378	Teaching and Leading of Strength and Resistance Training	3
PE 306	Conditioning for Athletic Performance	3
<b>Required Practicum Experience</b>		
PE 166	Coaching Practicum <sup>1</sup>	3
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> Must be taken three times

- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN COACHING (61E)

This program is effective as of Fall 2018.

Revised 8-2019

## Teaching Health and Physical Education On-line, Certificate

*This certification is currently not available as PE 302, PE 304, and PE 305 are not offered at this time. PE 303 is available during winter session.*

The Physical and Health Education Certificate in Teaching Health and Physical Education (H/PE) on-line will be offered on-line through distance education. The Certificate is designed to enhance the teacher's ability to effectively teach health and physical education through distance education and best practices. Courses will be offered winter and summer sessions.

To access Certificate Requirements, please view the Curriculum Guide tab.

## Related Links

Teaching Health and Physical Education Online, Certificate Program Page (<https://www.sru.edu/academics/certificates/teaching-health-and-pe-online-certificate/>)

Physical and Health Education Department Page (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/physical-and-health-education/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

2.0 or higher certificate

### Certificate Requirements

Code	Title	Hours
PE 302	Foundations of Online Teaching and Learning	3
PE 303	Using Educational Technology to Enhance Learning	3
PE 304	Teaching Physical Education through Distance Education	3
PE 305	Teaching Health Education through Distance Education	3
<b>Total Hours</b>		<b>12</b>

- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

CERTIFICATE IN TEACHING HEALTH AND PHYSICAL EDUCATION ONLINE (1154)

This program is effective as of Fall 2014.

UCC 9-27-16

Revised 10-2019

## Wellness, Minor

The Wellness Minor is a testament of your determination to live a healthy lifestyle full of energy with minimal illness or disease. Rather than following the newest trending health fad or product, we choose a global perspective from the world's healthiest people. The courses in this certificate will help broaden your perspective, manage your stress, enhance your mood, and improve every part of your health. Your wellbeing is paramount to achieving your maximum potential, so get started toward a 'new' you now.

### WHY CHOOSE THIS Wellness Minor?

How long do you want to live? The average life expectancy of a United States citizen is 78 years, or about 4000 weeks, but people from the

healthiest places on earth easily live into their 100s, virtually disease-free. While many Americans may live to the age of 78, they often suffer from preventable diseases for decades, which often begin in their 40s and 50s. In this context, perhaps a better question to ask is "How well do you want to live?"

The Wellness Minor is designed to help you become a better version of yourself by uncovering truths about wellness so you can lead a life of the highest quality.

Still need another reason? This minor will make you more attractive to employers. When you have a high level of wellness, you take fewer sick days, you have more energy, and you are an asset to your organization. Every employer wants someone with high energy, has their life under control, and who is happy and productive. This minor sets you apart from everyone else by showing that you are dedicated to being your best.

### WHAT WILL YOU LEARN?

You learn through doing. You learn how to manage stress, how to choose healthy nutritious foods, and how physical activity improves your wellness. The capstone class, Living Well, links the many aspects of wellness together through application so you can achieve your best self. The world of wellness will continue to grow and expand as we learn more about health and our physiology. Remember, wellness encompasses nearly every aspect of living and there is almost no limit to how this certificate will improve your wellbeing and expand your career opportunities.

### CAREER OPPORTUNITIES

After taking one or more of these classes, many students have been inspired to incorporate wellbeing in their future career and help others raise their level of health. The breadth of wellness covers fields such as physical, environmental, emotional, spiritual, intellectual, occupational, financial, and social wellness. The opportunities are vast and growing. Adding this minor to your SRU degree is an investment in your greatest asset- you.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Wellness, Minor Program Page ([https://www.sru.edu/academics/majors-and-minors/wellness-\(minor\)/](https://www.sru.edu/academics/majors-and-minors/wellness-(minor)/))

Physical and Health Education Department Page (<http://www.sru.edu/academics/colleges-and-departments/coe/departments/physical-and-health-education/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Minor GPA: 2.0 or higher

### MINOR REQUIREMENTS

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits

Code	Title	Hours
<b>Physical Wellness Requirement</b>		
Select one of the following:		3
PE 238	Applied Principles of Exercise	
PE 306	Conditioning for Athletic Performance	
PE 310	Elementary School Wellness Skills and Fitness Activities	
or PE 311	Middle School Wellness Skills and Fitness Activities	
or PE 312	Secondary School Wellness Skills and Fitness Activities	
PE 338	Teaching and Leading Group Exercise	
PE 342	Wellness through Movement	
PE 378	Teaching and Leading of Strength and Resistance Training	
PE 393	Nutrition for Physical Activity, Exercise, and Health	
HLTH 203	Public Health and Physical Activity	
<b>Additional Wellness Category Requirements:</b>		
Select 4 courses from four separate categories:		12
<i>Physical Wellness</i>		
PE 238	Applied Principles of Exercise	
PE 306	Conditioning for Athletic Performance	
PE 338	Teaching and Leading Group Exercise	
PE 342	Wellness through Movement	
PE 378	Teaching and Leading of Strength and Resistance Training	
PE 393	Nutrition for Physical Activity, Exercise, and Health	
PE 310	Elementary School Wellness Skills and Fitness Activities	
or PE 311	Middle School Wellness Skills and Fitness Activities	
or PE 312	Secondary School Wellness Skills and Fitness Activities	
HLTH 203	Public Health and Physical Activity	
<i>Intellectual Wellness</i>		
PE 335	Science of the Mind-Body Connection	
EXSC 230	Stress Management	
LEAD 315	Mindfulness and Brain	
<i>Social/Emotional Wellness</i>		
PE 168	Physical Activity and Wellbeing in Society	
PE 258	Social & Emotional Wellness	
HLTH 101	Personal Health	
MUSI 204	Art and Science of Performing	
<i>Spiritual Wellness</i>		
PE 115	Yoga and Well-Being	
PE 133	Tai Chi Chuan: Chinese Classical Exercise	
LEAD 315	Mindfulness and Brain	
PHIL 140	World Religions	
<i>Environmental Wellness</i>		
GES 135	Introduction to Environmental Problems	
GES 215	Planning for Sustainable Communities	
EGEO 100	Environmental Geology	



BIOL 105	Environmental Biology
or ECON 315	Economics of Sustainable Development
Financial Wellness	
FIN 100	Personal Financial Planning
FIN 341	Entrepreneurial Finance
Occupational Wellness	
PE 379	Fitness Management
DANC 101	Wellness for Dancers
MUSI 203	Musician's Health
<b>Capstone Course Requirement</b>	
PE 430	Living Well
<b>Total Hours</b>	<b>18</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN WELLNESS (61G)

This program is effective as of Summer 2021

Revised 07.15.2021

UCC 04.13.2021

## Secondary Education/Foundations of Education

Chair	Secretary	Location	Department Phone
Dr. Edwin Christmann	Germaine Newstrom	001 McKay Education Building	724-738-2041

Department Web Site URL (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/secondary-education/-foundations-of-education/>)

Department Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/sefe-fs.pdf>)

## The Rock Difference

The Department of Secondary Education/Foundations of Education is committed to the development of professional educators through the careful integration of theory and practice. Moreover, it is SEFE's position that there is an inseparable fusion between teachers' professional identities and their personal identities. Teaching is a reflective process that takes place within a diverse social, economic, political, and cultural complex that mandates continual development of the teacher. Since teaching does not take place in a vacuum, it is part of our mission to

provide opportunities for the total cognitive and affective development of our students so that they may become productive members of a teacher/ scholar community who will conduct research and disseminate knowledge that will enhance the education of students at all levels.

The mission of the department is to provide secondary education majors with the knowledge, and skills to succeed in today's changing classrooms. Moreover, the merging of theory with practice and the building of a solid background in foundations of education for all middle and secondary education majors are additional hallmarks.

Prospective secondary school teachers are required to take for certification, coursework in an academic discipline that is equivalent to a major in that discipline. Successful completion of a prescribed program and certification examinations are required for eligibility for certification by the Pennsylvania Department of Education.

A secondary education major is advised by a faculty member in the Department of Secondary Education/Foundations of Education. Students may choose to attain dual certification, that is, to become eligible to teach in more than one subject area. The decision to attempt this dual certification should be made as early as possible in order to facilitate scheduling. It is the responsibility of the students to understand the certification requirements and to schedule all required courses.

## Requirements for the Bachelor of Science in Education

The department uses both state and national guidelines to continually update its accredited programs. Therefore, the specific course of study and the most recent requirements leading to teacher certification in this department are available in the departmental office or from the student's adviser. See also Teacher Education Policy Manual, available in 105 McKay Education Building and on the College of Education homepage. Areas of teacher certification in secondary education at the baccalaureate level include:

- English
- French
- Social Studies - History
- Spanish

Areas of teacher certification in middle level education at the baccalaureate level include:

- English- Language Arts
- Social Studies
- Science
- Mathematics

Areas of Teacher Certification in Secondary Education at the master's level:

- Biology
- Chemistry
- Earth and Space Science
- General Science
- Mathematics
- Physics
- English
- Social Studies

Certification in these latter areas is available only at the graduate level as part of the master of education degree program. For more information about this program, including prerequisites, contact the Secondary Education/Foundations of Education office in 114 McKay Education Building.

## Faculty

### Padma Anand

Professor  
Secondary Ed/Foundations Ed  
Ed.D., Memphis State University  
M.A., Mysore University (India)  
B.A., Bangalore University (India)

### James Anderson

Instructor  
Secondary Ed/Foundations Ed

### Richard Busi

Instructor  
Secondary Ed/Foundations Ed  
Ph.D., University of Florida  
M.E., Slippery Rock University  
B.S., Slippery Rock University

### Edwin Christmann

Professor  
Secondary Ed/Foundations Ed  
Ph.D., Old Dominion University  
M.Ed., Pennsylvania State University  
B.S.Ed., California University of Pennsylvania

### John Hicks

Associate Professor  
Secondary Ed/Foundations Ed  
Ph.D., Indiana University of Pennsylvania  
M.A., University of Notre Dame  
B.A., Slippery Rock University

### Jason Hilton

Professor  
Secondary Ed/Foundations Ed  
Ph.D., University of Pittsburgh  
M.Ed., University of Pittsburgh  
B.S., Edinboro University

### Mark Hogue

Associate Professor  
Secondary Ed/Foundations Ed  
Ph.D., Kent State University  
M.E., California University of Pennsylvania  
M.E., Slippery Rock University  
B.S., Slippery Rock University

### Michael Panza

Instructor  
Secondary Ed/Foundations Ed  
Ed.D., Nova University  
M.S., Duquesne University  
M.M., Duquesne University  
B.S., Duquesne University

### Linda Wagner-Pine

### Instructor

Secondary Ed/Foundations Ed  
M.Ed., Slippery Rock University  
B.Ed., Slippery Rock University

### Junko Yamamoto

Associate Professor  
Secondary Ed/Foundations Ed  
Ed.D., Duquesne University  
M.P.A., University of Pittsburgh  
B.A., University of Japan

## Programs

### Majors

- Middle-Level English/Language Arts (4-8), Bachelor of Science in Education (BSED) (p. 217)
- Middle-Level Math (4-8), Bachelor of Science in Education (BSED) (p. 220)
- Middle-Level Science (4-8), Bachelor of Science in Education (BSED) (p. 223)
- Middle-Level Social Studies (4-8), Bachelor of Science in Education (BSED) (p. 227)
- Secondary Education - English (7-12), Bachelor of Science in Education (BSED) (p. 230)
- Secondary Education - French (K-12), Bachelor of Science in Education (BSED) (p. 233)
- Secondary Education - Social Studies - History (7-12), Bachelor of Science in Education (BSED) (p. 236)
- Secondary Education - Spanish (K-12), Bachelor of Science in Education (BSED) (p. 240)

### Minors

- Middle Level Education, Minor (p. 217)

## Courses

### SEFE 139 - Foundations of Academic Discovery

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

### SEFE 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SEFE 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**SEFE 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SEFE 200 - Introduction to Education, Teaching Methods and Field**

This course is designed to introduce the student to the field of education. Topics covered include: the role of the teacher, structure and organization of schooling, and current issues and concerns relating to education.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Transfer Thread Completion Course

**SEFE 230 - Production and Utilization of Instructional Technology**

Selection, utilization and production of instructional materials. Equipment operation via self-instruction in the Media Lab.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**SEFE 245 - Middle Level Learning Theory**

This course provides pre-service teachers with a knowledge base of the learning theories, with a special focus on the application of the psychological learning theories to the teaching and learning of the adolescent learner.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 250 - Pre, Early, & Adolescent Development**

An analysis of the physical, social, emotional, cognitive, moral, and other developmental processes which occur during the pre-adolescent/adolescent years, and affect his/her learning.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 251 - Teaching Reading in the Content Areas Grades 4-8**

This course is designed to introduce the middle level teaching candidate to reading across the content areas.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Enrollment is limited to students with a program in Mid Level-Eng&Lang Arts (4-8), Mid Level-Mathematics (4-8), Mid Level-Social Studies (4-8) or Middle Level-Science (4-8).

**SEFE 280 - Cultural Minorities in Education**

A study of multi-cultural issues in American education with emphasis on the theory and practice relating to race, religion, ethnicity, social class, gender, age, and exceptionality.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**SEFE 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SEFE 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**SEFE 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SEFE 300 - Middle Level Cognitive Development**

This course provides pre-service teachers with a knowledge base of the various factors which affect the learning, cognition, and cognitive development of the pre-adolescent learner.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 311 - Teaching of Mathematics in the Middle School**

Students will explore curriculum models, teaching materials, technology and best teaching practices for enhancing middle school students' mathematical understanding.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 319 - Teaching of Social Studies in Secondary Schools**

The development and refinement of teaching competencies particularly related to the teaching of secondary school social studies: history, political science, economics, geography and sociology/anthropology. The course will emphasize the development of social studies in the school, teaching methodology (past and current), the unit approach to teaching social studies, media uses and preparation of media materials, teaching techniques, professional organizations, and teaching aids and materials such as computers, television and simulation programs.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 320 - Teaching of Language Arts in Secondary Schools**

The development and refinement of teaching competencies particularly related to instruction in secondary school language arts, including English. The course also emphasizes English curriculum, teaching strategies and methodologies and the use of media in content presentation.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 323 - Teaching World Languages**

Theory and methodology for teaching world languages throughout the K-12 curriculum.

Prerequisite: SEFE 200<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 324 - Methods for Teaching English as a Second Language and Bilingual Education**

A course designed to acquaint the prospective teacher at any level with the methodology used to teach English to native speakers of other languages. Also acquaints students with the specialized procedures used when teaching in bilingual classrooms (any two languages) on any level.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SEFE 325 - Teaching in the Middle Level Grades**

Focusing on middle school teaching in grades 4 through 8, this course examines the organization, curriculum, instructional strategies, classroom management techniques, and teaching methods for working with young adolescents. Also covered are middle level guidance, exploratories, scheduling, and parent-school relations.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 326 - ELL Strategies and Practice**

A course designed to acquaint the prospective teacher at any level with the methodology used to teach English Language Learners. Topics include linguistic and cultural diversity, standard-based instruction, assessment, and professionalism.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 329 - Methods of Instruction in Secondary Content Areas**

This course is designed to provide prospective secondary teachers with the opportunity to design and teach lessons using basic instructional models and teaching strategies. The role of reading, writing, and oral communication in the teaching/learning of secondary content is also addressed. Following microteaching episodes, students reflect upon and analyze the teaching processes to clarify instructional values and to encourage critical inquiry.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 335 - Teaching Middle Level Social Studies**

Designed for pre-service middle school teachers, focusing on grades 4 through 8, this multifaceted course compiles well-researched and essential information on social studies education. The course uses the standards recommended by the National Council for the Social Studies and the Pennsylvania Department of Education as a foundation, thoroughly discussing the core disciplines and thematic strands of social studies. The knowledge base is packed with useful information on an all-encompassing range of teaching methods and tools, including lesson planning, skills development, assessment, multiple intelligences, determining one's personal philosophy of education, and utilizing information technology.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 337 - Teaching Middle Level Language Arts**

This course provides pre-service upper elementary and/or middle-level teachers, focusing on grades 4 through 8, with the relevant teaching strategies and content for English pedagogy.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 338 - Standards-Based Instruction & Assessment in the Inclusionary Classroom**

Assessment skills, extensive practice, and the application of assessment results to design effective individualized interventions are essential middle level teaching skills. Successful demonstration of these abilities is an expected outcome through the PDE 430, Pennsylvania Statewide Evaluation Form for Student Professional Knowledge and Practice. Assessment knowledge has an important role in the standards and rubrics adopted by the National Middle School Association (NMSA). The "Assessment in a Standards Aligned System" section of this document has an overview of the types of assessments used in the Pre K-12 settings and competencies for all professional education candidates.

Credits: 3

Term(s) Typically Offered: Offered Spring & Winter Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 342 - Educational Psychology for Diverse Learners**

This course provides the knowledge-base of (behavior, social learning, cognitive, constructivist and humanistic) learning theories, as applied in the context of diverse teaching and learning environments. The content also includes the topics of assessment, evidence-based research methods, motivational theories, and classroom management skills to enable the pre-service teacher to create effective learning environments for diverse learning contexts.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SEFE 349 - Teaching of Science in the Middle School**

Students will explore curriculum models, teaching materials, technology and best teaching practices for enhancing middle school students' understanding in science.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 370 - Educational Measurements, Assessment and Evaluation**

Objectives for testing and evaluation; construction and analysis of classroom tests for evaluative and diagnostic purposes; construction and application of non-test tools for assessment, including portfolios; statistical analysis of testing and measurement data; use of standardized tests in the classroom; and the use of computers.

Prerequisite: SEFE 200<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SEFE 375 - Language Across the Secondary Curriculum**

An examination of the language processes and their connection to learning content in secondary school. Based on the understanding of language and learning processes, future secondary teachers learn to employ teaching strategies that both enhance learning and improve reading, writing, speaking, and listening skills. Required of all secondary majors.

Credits: 2

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 380 - History and Philosophy of Education**

Critical exploration of the philosophical issues and historical antecedents that form the bases for past and current American educational practice in a multicultural society.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SEFE 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**SEFE 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SEFE 401 - Education and American Activism**

This course examines the connections between the American education system and social activism in the United States. This includes contrasting theories relating to the purpose of public education, historical analysis of cases in which the education system played an active role either in supporting social change or in reinforcing social order, and a critical reflection upon current education reforms in the United States.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Thematic Thread(s): Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

**SEFE 420 - American Education in the Twenty-First Century: A Comparative Perspective**

American educational policies and practices are viewed within a global context. Undergraduate students, who will become parents and taxpayers, are introduced to the core social and educational institution in developed or developing societies: the school.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SEFE 422 - Practicum in the Middle-Level Grades**

Designed to give middle-level majors a pre-student teaching field experience in the middle level grades under the supervision of a University faculty member.

Credits: 1

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 426 - Practicum in Middle-Level & Secondary Education**

Designed to give SEFE majors a pre-student teaching field experience in a middle-level or secondary classroom within the grade-level and content area of their degree program under the supervision of a university faculty member.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 439 - Issues in the Diverse Secondary Content Area Classroom**

This course is designed to help secondary teachers apply theoretical models to classroom management and to the teaching of reading and writing in content area classrooms. Additionally, the principles of school law as they apply to classroom teachers will be examined. Finally, the course will be taken concurrently with student teaching to facilitate the integration of theory with practice.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 455 - Student Teaching - Secondary Education**

Under the guidance of a cooperating teacher and university supervisor, students engage in two eight-week assignments on a full-time basis in specified school districts and attend scheduled seminars. Supervisors assign additional requirements.

Credits: 3-12

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 456 - Student Teaching - Middle Level Grades**

Under the guidance of a cooperating teacher and university supervisor, teacher candidates engage in two eight-week assignments on a full-time basis in specified school districts at the middle level and also attend scheduled seminars. University supervisors assign additional requirements.

Credits: 12

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SEFE 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SEFE 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Middle Level Education, Minor

The Middle Level Education Minor prepares preservice teachers for the instruction of students in grades 4-8.

To access Minor Requirements, please view the Curriculum Guide tab.

### Related Links

Secondary Education/Foundations of Education Department Page (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/secondary-education/-foundations-of-education/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

### Curriculum Guide

#### GPA Requirement

Minor GPA: 2.0 or higher

#### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Young Adolescent Cognition</b>		
SEFE 245	Middle Level Learning Theory	3
SEFE 300	Middle Level Cognitive Development	3
<b>Middle School Organization and Philosophy</b>		
SEFE 380	History and Philosophy of Education	3
<b>Middle Level Pedagogy</b>		
SEFE 251	Teaching Reading in the Content Areas Grades 4-8	3
SEFE 325	Teaching in the Middle Level Grades	3
SEFE 338	Standards-Based Instruction & Assessment in the Inclusionary Classroom	3
<b>Total Hours</b>		<b>18</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum

categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Minor in Middle Level Education (15A)

This program is effective as of Fall 2018.

Revised 10.28.2021

## Middle-Level English/Language Arts (4-8), Bachelor of Science in Education (BSED)

All candidates completing this program and student teaching are eligible to receive Pennsylvania certification after achieving a passing or qualifying score on Pennsylvania Department of Education required exam(s). If you are interested in teaching in another state, please contact the Department of Education in that state.

### Related Links

Middle-Level Education - English/Language Arts, BSED Program Page (<https://www.sru.edu/academics/majors-and-minors/middle-level-education-english-and-language-arts/>)

Secondary Education/ Foundations of Education Department Page (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/secondary-education/-foundations-of-education/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

### Curriculum Guide

#### GPA Requirement

GPA must be 2.8 or higher for Teacher Candidacy.

A 3.0 GPA and passing subject area assessment (PECT) or a 2.8 GPA and a *qualifying* passing subject area assessment (PECT) score (as determined by PDE) is required for certification.

#### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	79

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3

STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
HIST 180	Spotlight on the Past	3
<i>Social Science Inquiry</i>		
POLS 101	American National Government	3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Additional Rock Studies 2 Requirements (12 credits)</b>		
COMM 217	Intercultural Communication	3
MATH 210	Mathematics for Elementary Teachers I	3
MATH 310	Mathematics for Elementary Teachers II	3
SPED 121	Overview of Special Education	3
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 40 major credits must be taken at SRU or PASSHE
- 40 major credits must be taken at the 300 level or above
- All grades in Professional Education & Specialization must be grades of "C" or above.

Code	Title	Hours
<b>Middle Level Education</b>		
SEFE 200	Introduction to Education, Teaching Methods and Field <sup>1</sup>	3
SEFE 230	Production and Utilization of Instructional Technology <sup>1</sup>	3
SEFE 251	Teaching Reading in the Content Areas Grades 4-8 <sup>1</sup>	3
SEFE 300	Middle Level Cognitive Development <sup>1</sup>	3
SEFE 326	ELL Strategies and Practice <sup>1</sup>	3
SEFE 337	Teaching Middle Level Language Arts <sup>1</sup>	3
SEFE 338	Standards-Based Instruction & Assessment in the Inclusionary Classroom <sup>1</sup>	3
SEFE 342	Educational Psychology for Diverse Learners <sup>1</sup>	3
SEFE 370	Educational Measurements, Assessment and Evaluation <sup>1</sup>	3
SEFE 380	History and Philosophy of Education <sup>1</sup>	3
SEFE 426	Practicum in Middle-Level & Secondary Education <sup>1</sup>	1
SEFE 456	Student Teaching - Middle Level Grades <sup>1,2</sup>	12
SPED 121	Overview of Special Education <sup>1,3</sup>	3
SPED 315	Special Education Issues in Diverse Secondary Classrooms <sup>1,2</sup>	3
Subtotal		49
<b>English Certification Specialization</b>		
ENGL 102	Critical Writing <sup>3</sup>	3
ENGL 104	Critical Reading <sup>3</sup>	3
COMM 217	Intercultural Communication <sup>3</sup>	3
<i>Required Courses</i>		
COMM 263	Mass Media and Society (Required)	3
ENGL 305	Practicum: Teaching Writing (Required)	3
ENGL 328	Young Adult Literature (Required)	3
Select four of the following classes:		12
ENGL 230	Introduction to Linguistics and Grammar	
or ENGL 331	Historical Development of the English Language	
ENGL 312	Introduction to Shakespeare	
ENGL 317	British Literature I	
or ENGL 318	British Literature II	
ENGL 319	American Literature I	
or ENGL 320	American Literature II	
ENGL 332	Modern English Grammar and Syntax	
ENGL 402	World Literature	

Subtotal	30
<b>Total Hours</b>	<b>79</b>

- <sup>1</sup> Course counts for 50% of Major requirements but not for Major GPA
- <sup>2</sup> SPED 315 & SEFE 456 must be taken in the same semester.
- <sup>3</sup> Credits earned in these courses will be applied to Rock Studies 2.
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Grades 4-6 Core Content Areas

- To meet the English Language Arts 12 credit Pennsylvania Department of Education requirements, students must complete SEFE 251 – Teaching Reading in the Content Areas Grades 4-8 if they have not completed ENGL 102.

Code	Title	Hours
<b>Social Studies</b>		
HIST 180	Spotlight on the Past <sup>1</sup>	3
POLS 101	American National Government <sup>1</sup>	3
SEFE 380	History and Philosophy of Education <sup>2</sup>	3
Select one of the following:		3
HIST 151	Ancient World to the Age of Global Encounters	
HIST 152	Early Modern to Contemporary World	
HIST 201	Colonial US to the Civil War Era	
HIST 202	US Civil War Era to Present	
<b>Math</b>		
MATH 118	Elementary Geometry	3
MATH 210	Mathematics for Elementary Teachers I <sup>1</sup>	3
MATH 310	Mathematics for Elementary Teachers II <sup>1</sup>	3
STAT 152	Elementary Statistics I <sup>1</sup>	3
<b>Science</b>		
SCI 101	Science of Life <sup>1</sup>	3
SCI 102	Understanding the Physical World <sup>1</sup>	3
Select two of the following classes from different departments:		6
BIOL 101	General Biology	
BIOL 104		
BIOL 105	Environmental Biology	
BIOL 216	Anatomy and Physiology I with Lab	
CHEM 104	Introduction Chemistry I	
CHEM 107	General Chemistry I	
EGEO 100	Environmental Geology	
EGEO 101	Physical Geology	
EGEO 121	Meteorology/Lab	
PHYS 101	Concepts of Science I with Lab	
PHYS 201	Elements of Physics I with Lab	
PHYS 211	General Physics I with Lab	
Subtotal		36
<b>Total Hours</b>		<b>36</b>

- <sup>1</sup> Credits earned in these courses will be applied to Rock Studies 2.
- <sup>2</sup> SEFE 380 credit earned will be applied to Professional Core.

### Prerequisites for Admission to Teacher Candidacy

- Grades below a “C” are not admissible.

Code	Title	Hours
<b>Basic Courses</b>		
Select six of the following:		18
ENGL 102	Critical Writing	
ENGL 104	Critical Reading	
SEFE 200	Introduction to Education, Teaching Methods and Field	
SEFE 230	Production and Utilization of Instructional Technology	
SEFE 326	ELL Strategies and Practice	
SEFE 370	Educational Measurements, Assessment and Evaluation	
SPED 121	Overview of Special Education	
<b>Math Requirement for BS in Education</b>		
Required prior to Admission to Teacher Candidacy		
Select one of the following:		3
MATH 118	Elementary Geometry	
MATH 210	Mathematics for Elementary Teachers I	
MATH 310	Mathematics for Elementary Teachers II	
STAT 152	Elementary Statistics I	3
<b>Total Hours</b>		<b>24</b>

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MIDDLE-LEVEL ENGLISH/LANGUAGE ARTS (4-8) - BSED (1231)

This program is effective as of Summer2019.

Revised 05.04.2022

UCC 03.01.2022

### Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
HIST 180	Spotlight on the Past	3
SCI 101	Science of Life	3
STAT 152	Elementary Statistics I	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Computer Competency Requirement <sup>2</sup>		0-3
<b>Hours</b>		<b>16-19</b>

<b>Spring</b>		
ENGL 104	Critical Reading	3
MATH 118	Elementary Geometry	3
SCI 102	Understanding the Physical World	3
SEFE 200	Introduction to Education, Teaching Methods and Field	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
<b>Hours</b>		<b>15</b>

**Second Year**

<b>Fall</b>		
POLS 170	Investigating Politics	3
SEFE 230	Production and Utilization of Instructional Technology	3
SPED 121	Overview of Special Education	3
BIO/CHEM/EGEO/PHYS Course 1		3
History Survey		3
<b>Hours</b>		<b>15</b>

<b>Spring</b>		
COMM 217	Intercultural Communication	3
COMM 263	Mass Media and Society	3
MATH 210	Mathematics for Elementary Teachers I	3
SEFE 326	ELL Strategies and Practice	3
BIO/CHEM/EGEO/PHYS Course 2		3
<b>Hours</b>		<b>15</b>

**Third Year**

<b>Fall</b>		
ENGL 328	Young Adult Literature	3
MATH 310	Mathematics for Elementary Teachers II	3
SEFE 370	Educational Measurements, Assessment and Evaluation	3
SEFE 380	History and Philosophy of Education	3
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>

<b>Spring</b>		
ENGL 305	Practicum: Teaching Writing	3
SEFE 251	Teaching Reading in the Content Areas Grades 4-8	3
SEFE 300	Middle Level Cognitive Development	3
SEFE 342	Educational Psychology for Diverse Learners	3
ENGL Course Major		3
<b>Hours</b>		<b>15</b>

**Fourth Year**

<b>Fall</b>		
SEFE 337	Teaching Middle Level Language Arts	3
ENGL Course Major		3
SEFE 338	Standards-Based Instruction & Assessment in the Inclusionary Classroom	3
SEFE 422	Practicum in the Middle-Level Grades	1
ENGL Course Major		3

ENGL Course Major		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
SEFE 456	Student Teaching - Middle Level Grades	12
SPED 315	Special Education Issues in Diverse Secondary Classrooms	3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>122-125</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> Pass Computer Competency Exam or complete CPSC 100, CPSC 110, CPSC 130, or PE 202

\* Students are encouraged to take ESAP 101 as a Free Elective.

Major Code: 1231

Revised: 05.03.2022

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

## Middle-Level Math (4-8), Bachelor of Science in Education (BSED)

All candidates completing this program and student teaching are eligible to receive Pennsylvania certification after achieving a passing or qualifying score on Pennsylvania Department of Education required exam(s). If you are interested in teaching in another state, please contact the Department of Education in that state.

## Related Links

Middle-Level Education - Mathematics, BSED Program Page (<https://www.sru.edu/academics/majors-and-minors/middle-level-education-mathematics/>)

Secondary Education/Foundations of Education Department Page (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/secondary-education/-foundations-of-education/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

GPA must be 2.8 or higher for Teacher Candidacy.

A 3.0 GPA and passing subject area assessment (PECT) or a 2.8 GPA and a *qualifying* passing subject area assessment (PECT) score (as determined by PDE) is required for certification.

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3



Computer Competency	0-3
Major Requirements	73

\* All undergraduate degree programs require a minimum of 120 credits.  
Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
HIST 180	Spotlight on the Past	3
<i>Social Science Inquiry</i>		
POLS 101	American National Government	3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Additional Rock Studies 2 Requirements (12 credits)</b>		
MATH 210	Mathematics for Elementary Teachers I	3
MATH 310	Mathematics for Elementary Teachers II	3
SPED 121	Overview of Special Education	3
Select one of the following:		3
HIST 151	Ancient World to the Age of Global Encounters	
HIST 152	Early Modern to Contemporary World	
HIST 201	Colonial US to the Civil War Era	
HIST 202	US Civil War Era to Present	
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		

ESAP 110	Beginning Algebra
<b>Total Hours</b>	<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 40 major credits must be taken at SRU or PASSHE
- 40 major credits must be taken at the 300 level or above
- All grades in Professional Education & Specialization must be grades of "C" or above.

Code	Title	Hours
<b>Middle Level Education</b>		
SEFE 200	Introduction to Education, Teaching Methods and Field <sup>1</sup>	3
SEFE 230	Production and Utilization of Instructional Technology <sup>1</sup>	3
SEFE 251	Teaching Reading in the Content Areas Grades 4-8 <sup>1</sup>	3
SEFE 300	Middle Level Cognitive Development <sup>1</sup>	3
SEFE 311	Teaching of Mathematics in the Middle School <sup>1</sup>	3
SEFE 326	ELL Strategies and Practice <sup>1</sup>	3
SEFE 338	Standards-Based Instruction & Assessment in the Inclusionary Classroom <sup>1</sup>	3
SEFE 342	Educational Psychology for Diverse Learners <sup>1</sup>	3
SEFE 370	Educational Measurements, Assessment and Evaluation <sup>1</sup>	3
SEFE 380	History and Philosophy of Education <sup>1</sup>	3
SEFE 426	Practicum in Middle-Level & Secondary Education <sup>1</sup>	1
SEFE 456	Student Teaching - Middle Level Grades <sup>1,2</sup>	12
SPED 121	Overview of Special Education <sup>1,3</sup>	3
SPED 315	Special Education Issues in Diverse Secondary Classrooms <sup>1,2</sup>	3
Subtotal		49
<b>Math Certification Specialization</b>		
Select 13 Credits from the courses listed below:		13

MATH 118	Elementary Geometry	
MATH 131	Discrete Mathematics	
MATH 225	Calculus I	
STAT 152	Elementary Statistics I <sup>3</sup>	
Select 11 credits from the courses listed below:		11
MATH 122	Finite Mathematics with Matrices	
MATH 125	Precalculus	
MATH 230	Calculus II	
MATH 231	Calculus III	
MATH 235	Foundations of Mathematical Proof	
MATH 240	Linear Algebra and Differential Equations	
STAT 252	Introduction to Statistical Modeling	
Subtotal		24
<b>Total Hours</b>		<b>73</b>

- <sup>1</sup> Course counts for 50% of Major requirements but not for Major GPA
- <sup>2</sup> SPED 315 & SEFE 456 must be taken in the same semester.
- <sup>3</sup> Credits earned in these courses will be applied to Rock Studies 2.
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Grades 4-6 Core Content Areas

- To meet the English Language Arts 12 credit Pennsylvania Department of Education requirements, students must complete SEFE 251 – Teaching Reading in the Content Areas Grades 4-8 if they have not completed ENGL 102.

Code	Title	Hours
<b>Social Studies</b>		
HIST 180	Spotlight on the Past <sup>1</sup>	3
POLS 101	American National Government <sup>1</sup>	3
SEFE 380	History and Philosophy of Education <sup>2</sup>	3
Select one of the following:		3
HIST 151	Ancient World to the Age of Global Encounters <sup>1</sup>	
HIST 152	Early Modern to Contemporary World <sup>1</sup>	
HIST 201	Colonial US to the Civil War Era <sup>1</sup>	
HIST 202	US Civil War Era to Present <sup>1</sup>	
<b>English/Language Arts</b>		
ENGL 102	Critical Writing <sup>1</sup>	3
ENGL 104	Critical Reading <sup>1</sup>	3
ENGL 328	Young Adult Literature	3
ENGL 305	Practicum: Teaching Writing	3
<b>Science</b>		
SCI 101	Science of Life <sup>1</sup>	3
SCI 102	Understanding the Physical World <sup>1</sup>	3
Select two of the following classes from two different departments:		6
BIOL 101	General Biology	
BIOL 104		
BIOL 105	Environmental Biology	
BIOL 216	Anatomy and Physiology I with Lab	
CHEM 104	Introduction Chemistry I	
CHEM 107	General Chemistry I	

EGEO 100	Environmental Geology	
EGEO 101	Physical Geology	
EGEO 121	Meteorology/Lab	
PHYS 101	Concepts of Science I with Lab	
PHYS 201	Elements of Physics I with Lab	
PHYS 211	General Physics I with Lab	
Subtotal		36
<b>Total Hours</b>		<b>36</b>

- <sup>1</sup> Credits earned in these courses will be applied to Rock Studies 2.
- <sup>2</sup> SEFE 380 credit earned will be applied to Professional Core.

### Prerequisites for Admission to Teacher Candidacy

- Grades below a “C” are not admissible.

Code	Title	Hours
<b>Basic Courses</b>		
Select six of the following:		18
ENGL 102	Critical Writing	
ENGL 104	Critical Reading	
SPED 121	Overview of Special Education	
SEFE 230	Production and Utilization of Instructional Technology	
SEFE 326	ELL Strategies and Practice	
SEFE 370	Educational Measurements, Assessment and Evaluation	
<b>Math Requirement for BS in Education</b>		
Required prior to Admission to Teacher Candidacy		
Select one of the following:		3
MATH 118	Elementary Geometry	
MATH 210	Mathematics for Elementary Teachers I	
MATH 310	Mathematics for Elementary Teachers II	
STAT 152	Elementary Statistics I	3
<b>Total Hours</b>		<b>24</b>

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MIDDLE-LEVEL MATHEMATICS (4-8) - BSed (1233)

This program is effective as of Summer 2019.

Revised 09.14.2022

UCC 03.01.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
HIST 180	Spotlight on the Past	3
SCI 101	Science of Life	3
STAT 152	Elementary Statistics I	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Computer Competency Requirement <sup>2</sup>		0-3
<b>Hours</b>		<b>16-19</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
SEFE 200	Introduction to Education, Teaching Methods and Field	3
SCI 102	Understanding the Physical World	3
Math Certification Specialization Course		3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
POLS 101	American National Government	3
SEFE 230	Production and Utilization of Instructional Technology	3
SPED 121	Overview of Special Education	3
Select one of the following:		3
HIST 151	Ancient World to the Age of Global Encounters	
HIST 152	Early Modern to Contemporary World	
HIST 201	Colonial US to the Civil War Era	
HIST 202	US Civil War Era to Present	
BIO/CHEM/EGEO/PHYS Course 1		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
MATH 210	Mathematics for Elementary Teachers I	3
SEFE 326	ELL Strategies and Practice	3
BIO/CHEM/EGEO/PHYS Course 2		3
Math Certification Specialization Course		3
Math Certification Specialization Course		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
ENGL 328	Young Adult Literature	3
MATH 310	Mathematics for Elementary Teachers II	3
SEFE 370	Educational Measurements, Assessment and Evaluation	3
SEFE 380	History and Philosophy of Education	3

Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ENGL 305	Practicum: Teaching Writing	3
SEFE 300	Middle Level Cognitive Development	3
SEFE 342	Educational Psychology for Diverse Learners	3
Math Certification Specialization Course		3
Math Certification Specialization Course		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
SEFE 251	Teaching Reading in the Content Areas Grades 4-8	3
SEFE 311	Teaching of Mathematics in the Middle School	3
SEFE 338	Standards-Based Instruction & Assessment in the Inclusionary Classroom	3
SEFE 426	Practicum in Middle-Level & Secondary Education	1
Math Certification Specialization Course		3
Math Certification Specialization Course		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
SEFE 456	Student Teaching - Middle Level Grades	12
SPED 315	Special Education Issues in Diverse Secondary Classrooms	3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>122-125</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> Pass Computer Competency Exam or complete CPSC 100, CPSC 110, CPSC 130, or PE 202

\* Students are encouraged to take ESAP 101 as a Free Elective.

Major Code: 1233

Revised: 05.03.2022

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

## Middle-Level Science (4-8), Bachelor of Science in Education (BSED)

All candidates completing this program and student teaching are eligible to receive Pennsylvania certification after achieving a passing or qualifying score on Pennsylvania Department of Education required exam(s). If you are interested in teaching in another state, please contact the Department of Education in that state.

Related Links

Middle-Level Education - Science, BSED Program Page (<https://www.sru.edu/academics/majors-and-minors/middle-level-education-science/>)

Secondary Education/Foundations of Education Department Page (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/secondary-education/-foundations-of-education/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

Curriculum Guide

GPA Requirement

GPA must be 2.8 or higher for Teacher Candidacy.

A 3.0 GPA and passing subject area assessment (PECT) or a 2.8 GPA and a *qualifying* passing subject area assessment (PECT) score (as determined by PDE) is required for certification.

Summary\*

Code	Title	Hours
Rock Studies 2 Requirements		42
Other Basic Requirements		0-3
Computer Competency		0-3
Major Requirements		79

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	15
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
HIST 180	Spotlight on the Past	3
<i>Social Science Inquiry</i>		
POLS 101	American National Government	3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Additional Rock Studies 2 Requirements (12 credits)</b>		

MATH 210	Mathematics for Elementary Teachers I	3
MATH 310	Mathematics for Elementary Teachers II	3
SPED 121	Overview of Special Education	3
Select one of the following:		3
HIST 151	Ancient World to the Age of Global Encounters	42
HIST 152	Early Modern to Contemporary World	
HIST 201	Colonial US to the Civil War Era	
HIST 202	US Civil War Era to Present	
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		0-3
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		

DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

Major Requirements

- 40 major credits must be taken at SRU or PASSHE
- 40 major credits must be taken at the 300 level or above
- All grades in Professional Education & Specialization must be grades of "C" or above.

Code	Title	Hours
<b>Middle Level Education</b>		
SEFE 200	Introduction to Education, Teaching Methods and Field <sup>1</sup>	3
SEFE 230	Production and Utilization of Instructional Technology <sup>1</sup>	3

SEFE 251	Teaching Reading in the Content Areas Grades 4-8 <sup>1</sup>	3
SEFE 300	Middle Level Cognitive Development <sup>1</sup>	3
SEFE 326	ELL Strategies and Practice <sup>1</sup>	3
SEFE 338	Standards-Based Instruction & Assessment in the Inclusionary Classroom <sup>1</sup>	3
SEFE 342	Educational Psychology for Diverse Learners <sup>1</sup>	3
SEFE 349	Teaching of Science in the Middle School <sup>1</sup>	3
SEFE 370	Educational Measurements, Assessment and Evaluation <sup>1</sup>	3
SEFE 380	History and Philosophy of Education <sup>1</sup>	3
SEFE 426	Practicum in Middle-Level & Secondary Education	1
SEFE 456	Student Teaching - Middle Level Grades <sup>1,2</sup>	12
SPED 121	Overview of Special Education <sup>1,3</sup>	3
SPED 315	Special Education Issues in Diverse Secondary Classrooms <sup>1,2</sup>	3
Subtotal		49
<b>Science Certification Specialization</b>		
SCI 101	Science of Life <sup>3</sup>	3
SCI 102	Understanding the Physical World <sup>3</sup>	3
Select at least 24 credits from the following list:		24
BIOL 105	Environmental Biology	
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	
EGEO 100 & EGEO 110	Environmental Geology and Environmental Geology Lab	
EGEO 121	Meteorology/Lab	
EGEO 131	Oceanography	
EGEO 201	Earth Materials and Processes/Lab	
PHYS 201	Elements of Physics I with Lab	
PHYS 202	Elements of Physics II/ Lab	
PHYS 317	Space Science	
Subtotal		30
<b>Total Hours</b>		<b>79</b>

<sup>1</sup> Course counts for 50% of Major requirements but not for Major GPA

<sup>2</sup> SPED 315 & SEFE 456 must be taken in the same semester.

<sup>3</sup> Credits earned in these courses will be applied to Rock Studies 2.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Grades 4-6 Core Content Areas

- To meet the English Language Arts 12 credit Pennsylvania Department of Education requirements, students must complete SEFE 251 – Teaching Reading in the Content Areas Grades 4-8 if they have not completed ENGL 102.

Code	Title	Hours
<b>Social Studies</b>		
HIST 180	Spotlight on the Past <sup>1</sup>	3
POLS 101	American National Government <sup>1</sup>	3

SEFE 380	History and Philosophy of Education <sup>2</sup>	3
Select one of the following:		3
HIST 151	Ancient World to the Age of Global Encounters <sup>1</sup>	
HIST 152	Early Modern to Contemporary World <sup>1</sup>	
HIST 201	Colonial US to the Civil War Era <sup>1</sup>	
HIST 202	US Civil War Era to Present <sup>1</sup>	
Subtotal		12
<b>English/Language Arts</b>		
ENGL 102	Critical Writing <sup>1</sup>	3
ENGL 104	Critical Reading <sup>1</sup>	3
ENGL 305	Practicum: Teaching Writing	3
ENGL 328	Young Adult Literature	3
Subtotal		12
<b>Math</b>		
MATH 118	Elementary Geometry	3
MATH 210	Mathematics for Elementary Teachers I <sup>1</sup>	3
MATH 310	Mathematics for Elementary Teachers II <sup>1</sup>	3
STAT 152	Elementary Statistics I <sup>1</sup>	3
Subtotal		12
<b>Total Hours</b>		<b>36</b>

<sup>1</sup> Credits earned in these courses will be applied to Rock Studies 2.

<sup>2</sup> SEFE 380 credit earned will be applied to Professional Core.

### Prerequisites for Admission to Teacher Candidacy

- Grades below a "C" are not admissible.

Code	Title	Hours
<b>Basic Courses</b>		
Select six of the following:		18
ENGL 102	Critical Writing	
ENGL 104	Critical Reading	
SPED 121	Overview of Special Education	
SEFE 230	Production and Utilization of Instructional Technology	
SEFE 326	ELL Strategies and Practice	
SEFE 370	Educational Measurements, Assessment and Evaluation	
<b>Math Requirement for BS in Education</b>		
Required prior to Admission to Teacher Candidacy		
Select one of the following:		3
MATH 118	Elementary Geometry	
MATH 210	Mathematics for Elementary Teachers I	
MATH 310	Mathematics for Elementary Teachers II	
STAT 152	Elementary Statistics I	3
<b>Total Hours</b>		<b>24</b>

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to



ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MIDDLE-LEVEL SCIENCE (4-8) - BSED (1235)

This program is effective as of Summer 2019.

Revised 04.29.2022

UCC 03.01.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
HIST 180	Spotlight on the Past	3
SCI 101	Science of Life	3
STAT 152	Elementary Statistics I	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Computer Competency Requirement <sup>2</sup>		0-3
<b>Hours</b>		<b>16-19</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
MATH 118	Elementary Geometry	3
SCI 102	Understanding the Physical World	3
SEFE 200	Introduction to Education, Teaching Methods and Field	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
POLS 170	Investigating Politics	3
SEFE 230	Production and Utilization of Instructional Technology	3
SPED 121	Overview of Special Education	3
MATH 210	Mathematics for Elementary Teachers I	3
Science Course Major		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
SEFE 326	ELL Strategies and Practice	3
Select one of the following:		3
HIST 151	Ancient World to the Age of Global Encounters	
HIST 152	Early Modern to Contemporary World	
HIST 201	Colonial US to the Civil War Era	
HIST 202	US Civil War Era to Present	
Science Course Major		3
Science Course Major		3

Science Course Major		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
ENGL 328	Young Adult Literature	3
MATH 310	Mathematics for Elementary Teachers II	3
SEFE 370	Educational Measurements, Assessment and Evaluation	3
SEFE 380	History and Philosophy of Education	3
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ENGL 305	Practicum: Teaching Writing	3
SEFE 300	Middle Level Cognitive Development	3
SEFE 342	Educational Psychology for Diverse Learners	3
Science Course Major		3
Science Course Major		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
SEFE 251	Teaching Reading in the Content Areas Grades 4-8	3
SEFE 338	Standards-Based Instruction & Assessment in the Inclusionary Classroom	3
SEFE 349	Teaching of Science in the Middle School	3
Science Course Major		3
SEFE 422	Practicum in the Middle-Level Grades	1
Science Course Major		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
SEFE 456	Student Teaching - Middle Level Grades	12
SPED 315	Special Education Issues in Diverse Secondary Classrooms	3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>122-125</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> Pass Computer Competency Exam or complete CPSC 100, CPSC 110, CPSC 130, or PE 202

\* Students are encouraged to take ESAP 101 as a Free Elective.

Major Code: 1235

Revised: 05.03.2022

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

## Middle-Level Social Studies (4-8), Bachelor of Science in Education (BSED)

All candidates completing this program and student teaching are eligible to receive Pennsylvania certification after achieving a passing or qualifying score on Pennsylvania Department of Education required exam(s). If you are interested in teaching in another state, please contact the Department of Education in that state.

### Related Links

Middle-Level Education - Social Studies, BSED Program Page (<https://www.sru.edu/academics/majors-and-minors/middle-level-education-social-studies/>)

Secondary Education/Foundations of Education Department Page (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/secondary-education/-foundations-of-education/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

### Curriculum Guide

#### GPA Requirement

GPA must be 2.8 or higher for Teacher Candidacy.

A 3.0 GPA and passing subject area assessment (PECT) or a 2.8 GPA and a *qualifying* passing subject area assessment (PECT) score (as determined by PDE) is required for certification.

#### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	76

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

#### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3

<i>Humanities Inquiry</i>		
HIST 180	Spotlight on the Past	3
<i>Social Science Inquiry</i>		
POLS 101	American National Government	3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Additional Rock Studies 2 Requirements (12 credits)</b>		
MATH 210	Mathematics for Elementary Teachers I	3
MATH 310	Mathematics for Elementary Teachers II	3
SPED 121	Overview of Special Education	3
Select one of the following:		3
HIST 151	Ancient World to the Age of Global Encounters	
HIST 152	Early Modern to Contemporary World	
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

#### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

#### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

#### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

#### Major Requirements

- 40 major credits must be taken at SRU or PASSHE
- 40 major credits must be taken at the 300 level or above

- All grades in Professional Education & Specialization must be grades of "C" or above.

Code	Title	Hours
<b>Middle Level Education</b>		
SEFE 200	Introduction to Education, Teaching Methods and Field <sup>1</sup>	3
SEFE 230	Production and Utilization of Instructional Technology <sup>1</sup>	3
SEFE 251	Teaching Reading in the Content Areas Grades 4-8 <sup>1</sup>	3
SEFE 300	Middle Level Cognitive Development <sup>1</sup>	3
SEFE 326	ELL Strategies and Practice <sup>1</sup>	3
SEFE 335	Teaching Middle Level Social Studies <sup>1</sup>	3
SEFE 338	Standards-Based Instruction & Assessment in the Inclusionary Classroom <sup>1</sup>	3
SEFE 342	Educational Psychology for Diverse Learners <sup>1</sup>	3
SEFE 370	Educational Measurements, Assessment and Evaluation <sup>1</sup>	3
SEFE 380	History and Philosophy of Education <sup>1</sup>	3
SEFE 426	Practicum in Middle-Level & Secondary Education <sup>1</sup>	1
SEFE 456	Student Teaching - Middle Level Grades <sup>1,2</sup>	12
SPED 121	Overview of Special Education <sup>1,3</sup>	3
SPED 315	Special Education Issues in Diverse Secondary Classrooms <sup>1,2</sup>	3
Subtotal		49
<b>Social Studies Certification Specialization</b>		
HIST 180	Spotlight on the Past <sup>3</sup>	3
Select one of the following:		3
HIST 151	Ancient World to the Age of Global Encounters <sup>3</sup>	
HIST 152	Early Modern to Contemporary World <sup>3</sup>	
HIST 435	Pennsylvania	3
POLS 101	American National Government <sup>3</sup>	3
HIST 300/400 level		3
HIST 300/400 level		3
Select two Social Studies courses from the following:		6
ECON 105	Economics of Social Issues	
ECON 201	Principles of Macroeconomics	
ECON 202	Principles of Microeconomics	
GES 105	World Regional Geography	
GES 170	Discover Geography	
INDP 106	Race and Ethnic Diversity in the USA	
INDP 201	Principles of Sociology	
INDP 202	Introduction to Anthropology	
PSYC 105	Introduction to Psychology	
Select one History course from the following:		3
HIST 201	Colonial US to the Civil War Era	
HIST 202	US Civil War Era to Present	
Subtotal		27
<b>Total Hours</b>		<b>76</b>

<sup>1</sup> Course counts for 50% of Major requirements but not for Major GPA

<sup>2</sup> SPED 315 & SEFE 456 must be taken in the same semester.

<sup>3</sup> Credits earned in these courses will be applied to Rock Studies 2.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Grades 4-6 Core Content Areas

- To meet the English Language Arts 12 credit Pennsylvania Department of Education requirements, students must complete SEFE 251 – Teaching Reading in the Content Areas Grades 4-8 if they have not completed ENGL 102.

Code	Title	Hours
<b>English/Language Arts</b>		
ENGL 102	Critical Writing <sup>1</sup>	3
ENGL 104	Critical Reading <sup>1</sup>	3
ENGL 305	Practicum: Teaching Writing	3
ENGL 328	Young Adult Literature	3
<b>Math</b>		
STAT 152	Elementary Statistics I <sup>1</sup>	3
MATH 118	Elementary Geometry	3
MATH 210	Mathematics for Elementary Teachers I <sup>1</sup>	3
MATH 310	Mathematics for Elementary Teachers II <sup>1</sup>	3
<b>Science</b>		
SCI 101	Science of Life <sup>1</sup>	3
SCI 102	Understanding the Physical World <sup>1</sup>	3
Select two of the following classes from different departments:		6
BIOL 101	General Biology	
BIOL 104		
BIOL 105	Environmental Biology	
BIOL 216	Anatomy and Physiology I with Lab	
CHEM 104	Introduction Chemistry I	
CHEM 107	General Chemistry I	
EGEO 100	Environmental Geology	
EGEO 101	Physical Geology	
EGEO 121	Meteorology/Lab	
PHYS 101	Concepts of Science I with Lab	
PHYS 201	Elements of Physics I with Lab	
PHYS 211	General Physics I with Lab	
Subtotal		36
<b>Total Hours</b>		<b>36</b>

<sup>1</sup> Credits earned in these courses will be applied to Rock Studies 2.

### Prerequisites for Admission to Teacher Candidacy

Grades below a "C" are not admissible.

Code	Title	Hours
<b>Basic Courses</b>		
Select 6 of the following:		18
ENGL 102	Critical Writing	
ENGL 104	Critical Reading	
SPED 121	Overview of Special Education	

SEFE 230	Production and Utilization of Instructional Technology	
SEFE 326	ELL Strategies and Practice	
SEFE 370	Educational Measurements, Assessment and Evaluation	
<b>Math Requirement for BS in Education</b>		
Required prior to Admission to Teacher Candidacy		
Select one of the following:		3
MATH 118	Elementary Geometry	
MATH 210	Mathematics for Elementary Teachers I	
MATH 310	Mathematics for Elementary Teachers II	
STAT 152	Elementary Statistics I	3
<b>Total Hours</b>		<b>24</b>

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MIDDLE-LEVEL SOCIAL STUDIES (4-8) - BSED (1234)

This program is effective as of Fall 2019.

Revised 06.29.2022

UCC 02.01.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
HIST 180	Spotlight on the Past	3
SCI 101	Science of Life	3
STAT 152	Elementary Statistics I	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Computer Competency Requirement <sup>2</sup>		0-3
<b>Hours</b>		<b>16-19</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
MATH 118	Elementary Geometry	3
SCI 102	Understanding the Physical World	3
SEFE 200	Introduction to Education, Teaching Methods and Field	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
<b>Hours</b>		<b>15</b>

### Second Year

#### Fall

POLS 170	Investigating Politics	3
SEFE 230	Production and Utilization of Instructional Technology	3
SPED 121	Overview of Special Education	3
BIO/CHEM/EGEO/PHYS Course 1		3
Social Studies Course Major		3
<b>Hours</b>		<b>15</b>

#### Spring

MATH 210	Mathematics for Elementary Teachers I	3
SEFE 326	ELL Strategies and Practice	3
Select one of the following:		3
HIST 151	Ancient World to the Age of Global Encounters	
HIST 152	Early Modern to Contemporary World	
BIO/CHEM/EGEO/PHYS Course 2		3
Social Studies Course Major		3
<b>Hours</b>		<b>15</b>

### Third Year

#### Fall

ENGL 328	Young Adult Literature	3
MATH 310	Mathematics for Elementary Teachers II	3
SEFE 370	Educational Measurements, Assessment and Evaluation	3
SEFE 380	History and Philosophy of Education	3
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>

#### Spring

ENGL 305	Practicum: Teaching Writing	3
SEFE 300	Middle Level Cognitive Development	3
SEFE 342	Educational Psychology for Diverse Learners	3
Social Studies Course Major		3
Social Studies Course Major		3
<b>Hours</b>		<b>15</b>

### Fourth Year

#### Fall

SEFE 251	Teaching Reading in the Content Areas Grades 4-8	3
SEFE 335	Teaching Middle Level Social Studies	3
Social Studies Course Major		3
SEFE 338	Standards-Based Instruction & Assessment in the Inclusionary Classroom	3
SEFE 422	Practicum in the Middle-Level Grades	1
Social Studies Course Major		3
<b>Hours</b>		<b>16</b>

#### Spring

SEFE 456	Student Teaching - Middle Level Grades	12
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SPED 315	Special Education Issues in Diverse Secondary Classrooms	3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>122-125</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> Pass Computer Competency Exam or complete CPSC 100, CPSC 110, CPSC 130, or PE 202

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 1233  
Revised: 05.03.2022

## Secondary Education - English (7-12), Bachelor of Science in Education (BSED)

This program prepares students for careers teaching English in secondary schools. Requirements for the Major in Secondary Education (7-12) include a combination courses and student teaching experiences that lead to certification for a state-approved teaching license. All candidates completing this program and student teaching are eligible to receive Pennsylvania certification after achieving a passing or qualifying score on Pennsylvania Department of Education required exam(s). If you are interested in teaching in another state, please contact the Department of Education in that state.

Teacher Education Policy Manual (<https://www.sru.edu/documents/academics/colleges/COE/Teacher%20Education%20Policy%20Manual%20HANDBOOK.pdf>)

## Related Links

Secondary Education - English, BSED Program Page (<https://www.sru.edu/academics/majors-and-minors/secondary-education-english/>)

Secondary Education/Foundations of Education Department Page (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/secondary-education/-foundations-of-education/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

GPA must be 2.8 or higher for Teacher Candidacy.

A 3.0 GPA and passing subject area assessment (PRAXIS) or a 2.8 GPA and a *qualifying* passing subject area assessment (PRAXIS) score (as determined by PDE) is required for certification.

## Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	43
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	91

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
ENGL 220	Introduction to Literary and Cultural Studies	3
<i>Social Science Inquiry</i>		
COMM 263	Mass Media and Society	3
<i>Physical &amp; Natural Sciences</i>		
SCI 101	Science of Life	3
SCI 102	Understanding the Physical World	3
Subtotal		15

### Additional Rock Studies 2 Requirements (13 credits)

MATH 125	Precalculus	4
SPED 121	Overview of Special Education	3
SPED 315	Special Education Issues in Diverse Secondary Classrooms	3
COMM 217	Intercultural Communication	3

**Total Hours** **43**

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		



ESAP 110	Beginning Algebra
<b>Total Hours</b>	<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		
0-3		
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 47 major credits must be taken at SRU or PASSHE
- 47 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Professional Education</b>		
All grades earned in Professional Education must be a "C" or above		
SEFE 200	Introduction to Education, Teaching Methods and Field	3
SEFE 230	Production and Utilization of Instructional Technology	3
SEFE 320	Teaching of Language Arts in Secondary Schools	3
SEFE 326	ELL Strategies and Practice	3
SEFE 338	Standards-Based Instruction & Assessment in the Inclusionary Classroom	3
SEFE 342	Educational Psychology for Diverse Learners	3
SEFE 370	Educational Measurements, Assessment and Evaluation	3
SEFE 380	History and Philosophy of Education	3
SEFE 426	Practicum in Middle-Level & Secondary Education	1
SEFE 455	Student Teaching - Secondary Education	12
SPED 121	Overview of Special Education	3
SPED 315	Special Education Issues in Diverse Secondary Classrooms	3
Subtotal		43
<b>Writing Specialization</b>		
ENGL 204	Composition and Rhetoric	3
ENGL 235	Writing for Non-Print Media	3
ENGL 305	Practicum: Teaching Writing	3

Subtotal		9
<b>Language Requirement</b>		
ENGL 230	Introduction to Linguistics and Grammar	3
ENGL 331	Historical Development of the English Language	3
ENGL 332	Modern English Grammar and Syntax	3
Subtotal		9
<b>Required English Courses</b>		
ENGL 312	Introduction to Shakespeare	3
or ENGL 389	Stratford Shakespeare Tour	
ENGL 317	British Literature I	3
ENGL 318	British Literature II	3
ENGL 319	American Literature I	3
ENGL 320	American Literature II	3
ENGL 328	Young Adult Literature	3
ENGL 402	World Literature	3
ENGL 403	Literary and Cultural Theory	3
Subtotal		24
<b>Communication Courses</b>		
COMM 215	Small Group Communication	3
or COMM 217	Intercultural Communication	
COMM 263	Mass Media and Society	3
Subtotal		6
<b>Total Hours</b>		<b>91</b>

<sup>1</sup> Course counts for 50% of Major and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Information

For information only: Please see adviser for more details pertaining to this certification

## Optional Dual Certification in Secondary Education and Special Education

Secondary Education majors can add special education certification by taking the following courses in addition to those required for the secondary education major.

Code	Title	Hours
SPED 230	Early Intervention Practices for Students with Disabilities	3
SPED 350	Universal Intervention	3
SPED 360	Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners	3
SPED 431	Intense Behavioral and Emotional Interventions for Neuro-Diverse Learners	3
SPED 432	Intensive ELA Interventions for Neuro-Diverse Learners	3
SPED 433	Assessment Strategies in Special Education	3
SPED 434	Professional Collaboration and Ethical Practices	3

SPED 435	Processes and Procedures in Special Education	3
<b>Total Hours</b>		<b>24</b>

**Prerequisites for Admission to Teacher Candidacy**

- Grades below a "C" are not admissible.

Code	Title	Hours
<b>Basic Courses</b>		
ENGL 102	Critical Writing	3
ENGL 220	Introduction to Literary and Cultural Studies	3
SEFE 230	Production and Utilization of Instructional Technology	3
SEFE 326	ELL Strategies and Practice	3
SEFE 370	Educational Measurements, Assessment and Evaluation	3
SPED 121	Overview of Special Education	3
<b>Math Requirement for BS in Education</b>		
Required prior to Admission to Teacher Candidacy		
MATH 113 or higher		6
<b>Total Hours</b>		<b>24</b>

**Important Curriculum Guide Notes**

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

SECONDARY EDUCATION - ENGLISH 7-12 BSED (1224)

Effective Summer 2019

Revised: 04.29.2022

UCC 03.01.2022

**RECOMMENDED FOUR-YEAR PLAN**

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
ESAP 101	FIRST Seminar *	1
SCI 101	Science of Life	3
SPED 121	Overview of Special Education	3
SUBJ 139	University Seminar <sup>1</sup>	3
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
SEFE 200	Introduction to Education, Teaching Methods and Field	3

ENGL 220	Introduction to Literary and Cultural Studies	3
STAT 152	Elementary Statistics I	3
COMM 217	Intercultural Communication	3
ENGL 104	Critical Reading	3
<b>Hours</b>		<b>15</b>

**Second Year**  
**Fall**

SEFE 230	Production and Utilization of Instructional Technology	3
MATH 125	Precalculus	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
ENGL 235	Writing for Non-Print Media	3
SEFE 370	Educational Measurements, Assessment and Evaluation	3
<b>Hours</b>		<b>16</b>

**Spring**

ENGL 204	Composition and Rhetoric <sup>(S)</sup>	3
COMM 263	Mass Media and Society	3
ENGL 230	Introduction to Linguistics and Grammar	3
SCI 102	Understanding the Physical World	3
SEFE 326	ELL Strategies and Practice	3
<b>Hours</b>		<b>15</b>

**Third Year**  
**Fall**

ENGL 328	Young Adult Literature <sup>(F)</sup>	3
ENGL 317	British Literature I <sup>(F)</sup>	3
ENGL 319	American Literature I <sup>(F)</sup>	3
ENGL 331	Historical Development of the English Language <sup>(F)</sup>	3
SEFE 380	History and Philosophy of Education	3
<b>Hours</b>		<b>15</b>

**Spring**

ENGL 312	Introduction to Shakespeare <sup>(S)</sup>	3
ENGL 318	British Literature II <sup>(S)</sup>	3
ENGL 320	American Literature II <sup>(S)</sup>	3
ENGL 332	Modern English Grammar and Syntax <sup>(S)</sup>	3
SEFE 338	Standards-Based Instruction & Assessment in the Inclusionary Classroom <sup>(S)</sup>	3
<b>Hours</b>		<b>15</b>

**Fourth Year**  
**Fall**

SEFE 320	Teaching of Language Arts in Secondary Schools <sup>(F)</sup>	3
SEFE 342	Educational Psychology for Diverse Learners	3
SEFE 426	Practicum in Middle-Level & Secondary Education	1
ENGL 305	Practicum: Teaching Writing <sup>(F)</sup>	3
ENGL 402	World Literature <sup>(F)</sup>	3

ENGL 403	Literary and Cultural Theory	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
SEFE 455	Student Teaching - Secondary Education	3-12
SPED 315	Special Education Issues in Diverse Secondary Classrooms	3
<b>Hours</b>		<b>6-15</b>
<b>Total Hours**</b>		<b>114-123</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

\* Students are encouraged to take ESAP 101 as a Free Elective.

F (F) Indicates Fall Course Only

S (S) Indicates Spring Course Only

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

SECONDARY EDUCATION - ENGLISH 7-12 BSED (1224)

Revised: 06.29.2022

## Secondary Education - French (K-12), Bachelor of Science in Education (BSED)

This program prepares students for careers teaching French in all school levels. Requirements for the Major in Secondary Education (K-12) include a combination of education courses and student teaching experiences that lead to certification for a state-approved teaching license. All candidates completing this program and student teaching are eligible to receive Pennsylvania certification after achieving a passing or qualifying score on Pennsylvania Department of Education required exam(s). If you are interested in teaching in another state, please contact the Department of Education in that state.

Teacher Education Policy Manual (<https://www.sru.edu/documents/academics/colleges/COE/Teacher%20Education%20Policy%20Manual%20HANDBOOK.pdf>)

## Related Links

Secondary Education - French, BSED Program Page (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/secondary-education-foundations-of-education/undergraduate-programs/>)

Secondary Education / Foundations of Education Department Page (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/secondary-education/-foundations-of-education/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

GPA must be 2.8 or higher for Teacher Candidacy.

A 3.0 GPA and passing subject area assessment (PRAXIS) or a 2.8 GPA and a *qualifying* passing subject area assessment (PRAXIS) score (as determined by PDE) is required for certification.

### Summary\*

Code	Title	Hours
Rock Studies 2 Requirements		43
Other Basic Requirements		0-3
Computer Competency		0-3
Major Requirements		76-82
Electives		1

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

#### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Physical &amp; Natural Sciences</i>		
SCI 101	Science of Life	3
SCI 102	Understanding the Physical World	3
Subtotal		15

#### Additional Rock Studies 2 Requirements (13 credits)

MATH 125	Precalculus	4
SPED 121	Overview of Special Education	3
SPED 315	Special Education Issues in Diverse Secondary Classrooms	3
FREN 300	French Grammar and Composition 1	3

**Total Hours** **43**

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
Total Hours		0-3

Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
Total Hours		0-3

DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

Major Requirements

- 38 major credits must be taken at SRU or PASSHE
- 38 major credits must be taken at the 300 level or above

Code	Title	Hours
Professional Education		
All grades earned in Professional Education must be a "C" or above		
CDEV 248	Human Development and Education	3
SEFE 200	Introduction to Education, Teaching Methods and Field	3
SEFE 230	Production and Utilization of Instructional Technology	3
SEFE 323	Teaching World Languages	3
SEFE 326	ELL Strategies and Practice	3
SEFE 338	Standards-Based Instruction & Assessment in the Inclusionary Classroom	3
SEFE 342	Educational Psychology for Diverse Learners	3
SEFE 370	Educational Measurements, Assessment and Evaluation	3
SEFE 380	History and Philosophy of Education	3
SEFE 426	Practicum in Middle-Level & Secondary Education	1
SEFE 455	Student Teaching - Secondary Education	12
SPED 121	Overview of Special Education	3

SPED 315	Special Education Issues in Diverse Secondary Classrooms	3
Subtotal		46
Secondary Content Area - French		
For student teaching and certification, all grades earned in Content Area must be a "C" or above.		
Basic Skill Courses		
Exemption is possible from these courses according to performance on the language placement test. CLEP, AP, and OPI credits are accepted.		
Complete the following:		0-15
FREN 101	French Language and Culture I	
FREN 102	French Language and Culture II	
FREN 103	French Language and Culture III	
FREN 201	French Conversation 1	
FREN 220	Reading in French	
Required French Courses		
FREN 300	French Grammar and Composition 1	3
FREN 301	French Conversation 2	3
or FREN 401	French Conversation 3	
FREN 305	France through the Ages	3
or FREN 306	France and Francophone Identities Today	
FREN 320	Main Currents in French Literature	3
FREN 350	French Linguistics and Phonetics	3
FREN 400	French Grammar and Composition 2	3
Select one of the following:		3
FREN 402	Eighteenth-Century Novel	
FREN 403	Nineteenth-Century French Literature	
FREN 404	Exploring French Culture through Media	
FREN 411	Literature of the Classical Period	
French Electives - For students who exempt from Basic Skills		
Select as many elects as necessary to reach 30 credits:		9-0
Subtotal		30-36
Total Hours		76-82

<sup>1</sup> Course counts for 50% of Major and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

Important Information

For information only. Please see adviser for more details pertaining to this certification

Optional Dual Certification in Secondary Education and Special Education

Secondary Education majors can add special education certification by taking the following courses in addition to those required for the secondary education major.

Code	Title	Hours
SPED 230	Early Intervention Practices for Students with Disabilities	3
SPED 350	Universal Intervention	3
SPED 360	Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners	3

SPED 431	Intense Behavioral and Emotional Interventions for Neuro-Diverse Learners	3
SPED 432	Intensive ELA Interventions for Neuro-Diverse Learners	3
SPED 433	Assessment Strategies in Special Education	3
SPED 434	Professional Collaboration and Ethical Practices	3
SPED 435	Processes and Procedures in Special Education	3
<b>Total Hours</b>		<b>24</b>

### Prerequisites for Admission to Teacher Candidacy

- Grades below a "C" are not admissible.

Code	Title	Hours
<b>Basic Courses</b>		
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
SEFE 230	Production and Utilization of Instructional Technology	3
SEFE 326	ELL Strategies and Practice	3
SEFE 370	Educational Measurements, Assessment and Evaluation	3
SPED 121	Overview of Special Education	3
<b>Math Requirement for BS in Education</b>		
Required prior to Admission to Teacher Candidacy		
MATH 113 or higher		6
<b>Total Hours</b>		<b>24</b>

### SECONDARY EDUCATION - FRENCH K-12 BSED (1228)

Effective Fall 2019

Revised: 02.10.2022

UCC 02.01.2022

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
ESAP 101	FIRST Seminar *	1
FREN 101	French Language and Culture I <sup>2</sup>	3
SCI 101	Science of Life	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3

Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
SEFE 200	Introduction to Education, Teaching Methods and Field	3
ENGL 104	Critical Reading	3
SCI 102	Understanding the Physical World	3
STAT 152	Elementary Statistics I	3
FREN 102	French Language and Culture II <sup>2</sup>	3
<b>Hours</b>		<b>15</b>

### Second Year

#### Fall

MATH 125	Precalculus	4
Social Science Inquiry (p. 29)		2
FREN 201	French Conversation 1	3
SEFE 230	Production and Utilization of Instructional Technology	3
FREN 103	French Language and Culture III <sup>2</sup>	3
<b>Hours</b>		<b>15</b>

#### Spring

SEFE 326	ELL Strategies and Practice	3
SEFE 370	Educational Measurements, Assessment and Evaluation	3
FREN 220	Reading in French	3
SPED 121	Overview of Special Education	3
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>

### Third Year

#### Fall

SEFE 323	Teaching World Languages	3
Creative & Aesthetic Inquiry (p. 29)		3
FREN Elective <sup>2</sup>		3
FREN 305 or FREN 306	France through the Ages or France and Francophone Identities Today	3
SEFE 342	Educational Psychology for Diverse Learners	3
<b>Hours</b>		<b>15</b>

#### Spring

SEFE 338	Standards-Based Instruction & Assessment in the Inclusionary Classroom	3
CDEV 248	Human Development and Education	3
FREN Elective <sup>3</sup>		3
FREN 300	French Grammar and Composition 1	3
FREN 301 or FREN 401	French Conversation 2 or French Conversation 3	3
<b>Hours</b>		<b>15</b>



**Fourth Year****Fall**

SEFE 426	Practicum in Middle-Level & Secondary Education	1
FREN 402 or FREN 403 or FREN 404 or FREN 411	Eighteenth-Century Novel or Nineteenth-Century French Literature or Exploring French Culture through Media or Literature of the Classical Period	3
FREN 400	French Grammar and Composition 2	3
SEFE 380	History and Philosophy of Education	3
FREN 320	Main Currents in French Literature	3
FREN 350	French Linguistics and Phonetics	3
<b>Hours</b>		<b>16</b>

**Spring**

SEFE 456	Student Teaching - Middle Level Grades	12
SPED 315	Special Education Issues in Diverse Secondary Classrooms	3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>122</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> French Elective for students who are exempt from basic skills. Total French credits must total 30.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

SECONDARY EDUCATION - FRENCH K-12 BSED (1228)  
Revised: 05.03.2022

## Secondary Education - Social Studies - History (7-12), Bachelor of Science in Education (BSED)

This program prepares students for careers teaching Social Studies / History in secondary schools. Requirements for the Major in Secondary Education (7-12) include a combination of education courses and student teaching experiences that lead to certification for a state-approved teaching license. All candidates completing this program and student teaching are eligible to receive Pennsylvania certification after achieving a passing or qualifying score on Pennsylvania Department of Education required exam(s). If you are interested in teaching in another state, please contact the Department of Education in that state.

Teacher Education Policy Manual (<https://www.sru.edu/documents/academics/colleges/COE/Teacher%20Education%20Policy%20Manual%20HANDBOOK.pdf>)

## Related Links

Secondary Education - Social Studies and History, BSED Program Page (<https://www.sru.edu/academics/majors-and-minors/secondary-education-social-studies-and-history/>)

Secondary Education / Foundations of Education Department Page (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/secondary-education/-foundations-of-education/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

GPA must be 2.8 or higher for Teacher Candidacy.

A 3.0 GPA and passing subject area assessment (PRAXIS) or a 2.8 GPA and a *qualifying* passing subject area assessment (PRAXIS) score (as determined by PDE) is required for certification.

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	40
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	97

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

#### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry (Waived)</i>		
<i>Social Science Inquiry (Waived)</i>		
<i>Physical &amp; Natural Sciences</i>		
SCI 101	Science of Life	3
Subtotal		6

#### Additional Rock Studies 2 Requirements

Select one of the following:			3
ECON 105	Economics of Social Issues		
ECON 201	Principles of Macroeconomics		
ECON 202	Principles of Microeconomics		

Select one of the following:	3
POLS 101 American National Government	
INDP 202 Introduction to Anthropology	
PSYC 105 Introduction to Psychology	3
MATH 125 Precalculus	4
SPED 121 Overview of Special Education	3
SPED 315 Special Education Issues in Diverse Secondary Classrooms	3
<b>Total Hours</b>	<b>40</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110 Beginning Algebra		
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100 Introduction to Computing for Liberal Arts		
CPSC 110 Computer Concepts		
CPSC 130 Introduction to Computing and Programming		
PE 202 Technology for Wellness		
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 52 major credits must be taken at SRU or PASSHE
- 52 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Professional Education</b>		
All grades earned in Professional Education must be a "C" or above		
SEFE 200 Introduction to Education, Teaching Methods and Field		3
SEFE 230 Production and Utilization of Instructional Technology		3

SEFE 319 Teaching of Social Studies in Secondary Schools	3
SEFE 326 ELL Strategies and Practice	3
SEFE 338 Standards-Based Instruction & Assessment in the Inclusionary Classroom	3
SEFE 370 Educational Measurements, Assessment and Evaluation	3
SEFE 380 History and Philosophy of Education	3
SEFE 426 Practicum in Middle-Level & Secondary Education	1
SEFE 455 Student Teaching - Secondary Education	12
SPED 121 Overview of Special Education	3
SPED 315 Special Education Issues in Diverse Secondary Classrooms	3
<b>Subtotal</b>	<b>40</b>

### Non-US History Courses

HIST 151 Ancient World to the Age of Global Encounters	3
HIST 152 Early Modern to Contemporary World	3

### US History Courses

HIST 201 Colonial US to the Civil War Era	3
HIST 202 US Civil War Era to Present	3

### Historian Methods/Historian Craft Course

HIST 205 The Historian's Craft	3
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### Economics Course

ECON 105 Economics of Social Issues	3
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### Geography Courses

GES XXX Geography Course	3
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### Political Science Courses

POLS 101 American National Government	3
POLS XXX Political Science Course	3

### Professional Studies Courses

INDP 106 Race and Ethnic Diversity in the USA	3
INDP 202 Introduction to Anthropology	3

### Psychology Course

PSYC 105 Introduction to Psychology	3
<b>Subtotal</b>	<b>36</b>

### Secondary Education Social Studies - History Electives

Must take at least six credits in two areas and nine credits required in one area.	21
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#### American History Electives (p. 238)

HIST 435 Pennsylvania	
HIST XXX American History Elective	
HIST XXX American History Elective	

#### Non-Western History Electives (p. 238)

HIST XXX Non-Western History Elective	
HIST XXX Non-Western History Elective	
HIST XXX Non-Western History Elective	

#### European History Electives (p. 238)

HIST XXX European History Elective	
HIST XXX European History Elective	
HIST XXX European History Elective	

Subtotal	21
<b>Total Hours</b>	<b>97</b>

<sup>1</sup> Course counts for 50% of Major and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### American History Electives

Code	Title	Hours
HIST 304	American Military History	3
HIST 313	U.S. Manhood and Masculinities	3
HIST 323	African American History to 1876	3
HIST 324	African American History Since 1876	3
HIST 335	Outstanding Americans	3
HIST 337	Native American History	3
HIST 344	The American City	3
HIST 350	The American Civil War	3
HIST 351	Latin America to 1830	3
HIST 352	Latin America Since 1830	3
HIST 358	American Popular Culture, 1865 to the Present	3
HIST 364	History of Medicine	3
HIST 390	Experimental	3
HIST 435	Pennsylvania	3
HIST 437	The American West	3
HIST 445	Americans and the Environment	3
HIST 450	History Internship	3
HIST 453	American Constitutional History and Law	3
HIST 490	Independent Study	3
HIST 498	Selected Topics	3

### European History Electives

Code	Title	Hours
HIST 305	Russia to 1855	3
HIST 306	Russia Since 1855	3
HIST 319	History of Women to 1750	3
HIST 331	England to 1689	3
HIST 332	Britain Since 1689	3
HIST 333	Medieval Church	3
HIST 346	Rise of Imperial Britain	3
HIST 347	Twentieth Century British Culture	3
HIST 364	History of Medicine	3
HIST 390	Experimental	3
HIST 404	Violence in Post-45 Europe	3
HIST 422	Ancient Greece	3
HIST 424	The Middle Ages	3
HIST 426	French Revolution and Napoleon	3
HIST 427	Nineteenth Century Europe	3
HIST 450	History Internship	3
HIST 464	The Scientific Revolution of the 17th and 18th Centuries	3

HIST 490	Independent Study	3
HIST 498	Selected Topics	3

### Non-Western History Electives

Code	Title	Hours
HIST 362	Africa North of the Zambezi	3
HIST 363	Southern Africa	3
HIST 364	History of Medicine	3
HIST 370	History and the Bible	3
HIST 371	History of Jews	3
HIST 376	Modern Japan	3
HIST 380	Egyptology	3
HIST 381	East Asian Military Traditions	3
HIST 382	Modern Asian Pacific Rim	3
HIST 386	Modern China	3
HIST 390	Experimental	3
HIST 406	Mass Killing and Genocide in the Modern World	3
HIST 450	History Internship	3
HIST 462	The Contemporary Middle East	3
HIST 463	Israel-History, State and Society	3
HIST 490	Independent Study	3
HIST 498	Selected Topics	3

### Important Information

For information only: Please see adviser for more details pertaining to this certification

### Optional Dual Certification in Secondary Education and Special Education

Secondary Education majors can add special education certification by taking the following courses in addition to those required for the secondary education major:

Code	Title	Hours
SPED 230	Early Intervention Practices for Students with Disabilities	3
SPED 350	Universal Intervention	3
SPED 360	Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners	3
SPED 431	Intense Behavioral and Emotional Interventions for Neuro-Diverse Learners	3
SPED 432	Intensive ELA Interventions for Neuro-Diverse Learners	3
SPED 433	Assessment Strategies in Special Education	3
SPED 434	Professional Collaboration and Ethical Practices	3
SPED 435	Processes and Procedures in Special Education	3
<b>Total Hours</b>		<b>24</b>

### Prerequisites for Admission to Teacher Candidacy

- Grades below a "C" are not admissible.

Code	Title	Hours
<b>Basic Courses</b>		
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
SEFE 230	Production and Utilization of Instructional Technology	3
SEFE 326	ELL Strategies and Practice	3
SEFE 370	Educational Measurements, Assessment and Evaluation	3
SPED 121	Overview of Special Education	3
<b>Math Requirement for BS in Education</b>		
Required prior to Admission to Teacher Candidacy		
MATH 113 or higher		6
<b>Total Hours</b>		<b>24</b>

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

SECONDARY EDUC - SOCIAL STUDIES - HISTORY 7-12 BSED (1277)

Effective Summer 2019

Revised: 04.29.22

UCC 03.01.2022

## RECOMMENDED FOUR-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
POLS 101	American National Government	3
PSYC 105	Introduction to Psychology	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
SEFE 230	Production and Utilization of Instructional Technology	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
SPED 121	Overview of Special Education	3
GES Elective		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
SEFE 200	Introduction to Education, Teaching Methods and Field	3

MATH 125	Precalculus	4
SEFE 326	ELL Strategies and Practice	3
ECON 105 or ECON 201	Economics of Social Issues or Principles of Macroeconomics	3
SCI 101	Science of Life	3
<b>Hours</b>		<b>16</b>

<b>Spring</b>		
INDP 202	Introduction to Anthropology	3
SEFE 370	Educational Measurements, Assessment and Evaluation	3
INDP 106	Race and Ethnic Diversity in the USA	3
HIST 151	Ancient World to the Age of Global Encounters	3
HIST 152	Early Modern to Contemporary World	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
<b>Hours</b>		<b>18</b>

<b>Third Year</b>		
<b>Fall</b>		
HIST 201	Colonial US to the Civil War Era	3
HIST 202	US Civil War Era to Present	3
HIST 205	The Historian's Craft	3
HIST Elective		3
POLS Elective		3
<b>Hours</b>		<b>15</b>

<b>Spring</b>		
SEFE 338	Standards-Based Instruction & Assessment in the Inclusionary Classroom <sup>(S)</sup>	3
SEFE 380	History and Philosophy of Education	3
HIST 435	Pennsylvania	3
HIST Elective		3
HIST Elective		3
<b>Hours</b>		<b>15</b>

<b>Fourth Year</b>		
<b>Fall</b>		
SEFE 319	Teaching of Social Studies in Secondary Schools <sup>(F)</sup>	3
SEFE 426	Practicum in Middle-Level & Secondary Education	1
HIST Elective		3
HIST Elective		3
HIST Elective		3
HIST Elective		3
<b>Hours</b>		<b>16</b>

<b>Spring</b>		
SEFE 455	Student Teaching - Secondary Education	3-12
SPED 315	Special Education Issues in Diverse Secondary Classrooms	3
<b>Hours</b>		<b>6-15</b>
<b>Total Hours**</b>		<b>117-126</b>

\* Students are encouraged to take ESAP 101 as a Free Elective.

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

F (F) indicates Fall course only.

S (S) indicates Spring course only.

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

SECONDARY EDUC - SOCIAL STUDIES - HISTORY 7-12 BSED (1277)

Revised: 06.29.2022

## Secondary Education - Spanish (K-12), Bachelor of Science in Education (BSED)

This program prepares students for careers teaching Spanish in all school levels. Requirements for the Major in Secondary Education (K-12) include a combination of education courses and student teaching experiences that lead to certification for a state-approved teaching license. All candidates completing this program and student teaching are eligible to receive Pennsylvania certification after achieving a passing or qualifying score on Pennsylvania Department of Education required exam(s). If you are interested in teaching in another state, please contact the Department of Education in that state.

Teacher Education Policy Manual (<https://www.sru.edu/documents/academics/colleges/COE/Teacher%20Education%20Policy%20Manual%20HANDBOOK.pdf>)

## Related Links

Secondary Education - Spanish, BSED Program Page (<https://www.sru.edu/academics/majors-and-minors/secondary-education-spanish/>)

Secondary Education / Foundations of Education Department Page (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/secondary-education/-foundations-of-education/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

GPA must be 2.8 or higher for Teacher Candidacy.

A 3.0 GPA and passing subject area assessment (PRAXIS) or a 2.8 GPA and a *qualifying* passing subject area assessment (PRAXIS) score (as determined by PDE) is required for certification.

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	43
	Other Basic Requirements	0-3
	Computer Competency	0-3

Major Requirements	76-85
Electives	1

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Physical &amp; Natural Sciences</i>		
SCI 101	Science of Life	3
SCI 102	Understanding the Physical World	3
Subtotal		15

### Additional Rock Studies 2 Requirements (13 credits)

MATH 125	Precalculus	4
SPED 121	Overview of Special Education	3
SPED 315	Special Education Issues in Diverse Secondary Classrooms	3
SPAN 300	Writing in Spanish for the Professions II	3

**Total Hours** **43**

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>



## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 38 major credits must be taken at SRU or PASSHE
- 38 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Professional Education</b>		
All grades earned in Professional Education must be a "C" or above.		
CDEV 248	Human Development and Education <sup>1</sup>	3
SEFE 200	Introduction to Education, Teaching Methods and Field <sup>1</sup>	3
SEFE 230	Production and Utilization of Instructional Technology <sup>1</sup>	3
SEFE 323	Teaching World Languages <sup>1</sup>	3
SEFE 326	ELL Strategies and Practice <sup>1</sup>	3
SEFE 338	Standards-Based Instruction & Assessment in the Inclusionary Classroom <sup>1</sup>	3
SEFE 342	Educational Psychology for Diverse Learners <sup>1</sup>	3
SEFE 370	Educational Measurements, Assessment and Evaluation <sup>1</sup>	3
SEFE 380	History and Philosophy of Education <sup>1</sup>	3
SEFE 426	Practicum in Middle-Level & Secondary Education <sup>1</sup>	1
SEFE 455	Student Teaching - Secondary Education <sup>1,2</sup>	12
SPED 121	Overview of Special Education <sup>1</sup>	3
SPED 315	Special Education Issues in Diverse Secondary Classrooms <sup>1,2</sup>	3
Subtotal		46

### Secondary Content Area - Spanish

For student teaching and certification all grades earned in Content Area must be a "C" or above.

#### Basic Skill Courses

Exemption is possible from these courses according to performance on the language placement test. CLEP, AP, and OPI credits are accepted:

SPAN 101	Spanish Language & Culture I <sup>1</sup>	
SPAN 102	Spanish Language & Culture II <sup>1</sup>	
SPAN 103	Spanish Language & Culture III <sup>1</sup>	
SPAN 200	Writing in Spanish for the Professions I <sup>1</sup>	
SPAN 201	Speaking in Spanish for the Professions I <sup>1</sup>	
SPAN 220	Understanding Hispanic Cultures Through Reading <sup>1</sup>	
<i>Required Spanish Courses</i>		
SPAN 300	Writing in Spanish for the Professions II <sup>1</sup>	3
SPAN 350	The Sounds of Spanish <sup>1</sup>	3
SPAN 400	Writing in Spanish for the Professions III <sup>1</sup>	3
SPAN 401	Speaking in Spanish for the Professions III <sup>1</sup>	3

#### Conversation Courses

Select one of the following:		3
SPAN 301	Speaking in Spanish for the Professions II <sup>1</sup>	
SPAN 302	Communication in Spanish for the Elementary Classroom <sup>1</sup>	

#### Civilization Courses

Select one of the following:		3
SPAN 305	Spain Today <sup>1</sup>	
SPAN 328	Latin American Today <sup>1</sup>	

#### Literature Courses

Select one of the following:		3
SPAN 431	Exploring Spanish Culture through Media <sup>1</sup>	
SPAN 432	Exploring Latin American Cultures through Media <sup>1</sup>	

#### Spanish Electives - For students who Exempt from Basic Skills

Choose as many SPAN electives as necessary to reach 30 credits	9-0
Subtotal	30-39

**Total Hours** **76-85**

<sup>1</sup> Course counts for 50% of Major but not for Major GPA.

<sup>2</sup> SPED 315 and SEFE 455 are taken together during the student teaching semester.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Information

For information only: Please see adviser for more details pertaining to this certification

### Optional Dual Certification in Secondary Education and Special Education

Secondary Education majors can add special education certification by taking the following courses in addition to those required for the secondary education major:

Code	Title	Hours
SPED 230	Early Intervention Practices for Students with Disabilities	3
SPED 350	Universal Intervention	3
SPED 360	Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners	3

SPED 431	Intense Behavioral and Emotional Interventions for Neuro-Diverse Learners	3
SPED 432	Intensive ELA Interventions for Neuro-Diverse Learners	3
SPED 433	Assessment Strategies in Special Education	3
SPED 434	Professional Collaboration and Ethical Practices	3
SPED 435	Processes and Procedures in Special Education	3
<b>Total Hours</b>		<b>24</b>

## Prerequisites for Teacher Candidacy

- Grades below a "C" are not admissible.

Code	Title	Hours
<b>Basic Courses</b>		
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
SEFE 230	Production and Utilization of Instructional Technology	3
SEFE 326	ELL Strategies and Practice	3
SEFE 370	Educational Measurements, Assessment and Evaluation	3
SPED 121	Overview of Special Education	3
<b>Math Requirement for BS in Education</b>		
Required prior to Admission to Teacher Candidacy		
MATH 113 or higher		6
<b>Total Hours</b>		<b>24</b>

SECONDARY EDUCATION - SPANISH K-12 BSED (1284)

Effective Fall 2019

Revised: 02.10.2022

UCC 02.01.2022

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
ESAP 101	FIRST Seminar *	1
SCI 101	Science of Life	3
SPAN 101	Spanish Language & Culture I <sup>2</sup>	3

SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
SEFE 200	Introduction to Education, Teaching Methods and Field	3
ENGL 104	Critical Reading	3
SCI 102	Understanding the Physical World	3
STAT 152	Elementary Statistics I	3
SPAN 102	Spanish Language & Culture II <sup>2</sup>	3
<b>Hours</b>		<b>15</b>

<b>Second Year</b>		
<b>Fall</b>		
MATH 125	Precalculus	4
SPED 121	Overview of Special Education	3
SPAN 103	Spanish Language & Culture III <sup>2</sup>	3
SEFE 230	Production and Utilization of Instructional Technology	3
SPAN 200	Writing in Spanish for the Professions I	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
SEFE 326	ELL Strategies and Practice	3
SEFE 370	Educational Measurements, Assessment and Evaluation	3
SPAN 201	Speaking in Spanish for the Professions I <sup>2</sup>	3
SPAN 220	Understanding Hispanic Cultures Through Reading <sup>2</sup>	3
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>

<b>Third Year</b>		
<b>Fall</b>		
SEFE 323	Teaching World Languages	3
Social Science Inquiry/ (p. 29)		3
SPAN 350	The Sounds of Spanish	3
CDEV 248	Human Development and Education	3
SEFE 342	Educational Psychology for Diverse Learners	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
SEFE 338	Standards-Based Instruction & Assessment in the Inclusionary Classroom	3
SPAN 401	Speaking in Spanish for the Professions III	3
SPAN 300	Writing in Spanish for the Professions II	3
Humanities Inquiry (p. 29)		3
Spanish Civilization Course <sup>3</sup>		3
<b>Hours</b>		<b>15</b>

<b>Fourth Year</b>		
<b>Fall</b>		
SEFE 426	Practicum in Middle-Level & Secondary Education	1

Spanish Literature Course <sup>4</sup>	3
SPAN 400 Writing in Spanish for the Professions III	3
SEFE 380 History and Philosophy of Education	3
Spanish Course Elective	3
Spanish Conversation Course <sup>4</sup>	3
<b>Hours</b>	<b>16</b>
<b>Spring</b>	
SEFE 455 Student Teaching - Secondary Education	3-12
SPED 315 Special Education Issues in Diverse Secondary Classrooms	3
<b>Hours</b>	<b>6-15</b>
<b>Total Hours**</b>	<b>114-123</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> Spanish Elective for students who are exempt from basic skills. Total Spanish credits must total 30.

<sup>3</sup> Select one of the following: SPAN 305 or SPAN 328

<sup>4</sup> Select one of the following: SPAN 301 or SPAN 302

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

SECONDARY EDUCATION - SPANISH K-12 BSSED (1284)

Revised: 05.03.2022

## Special Education

Chair	Secretary	Location	Department Phone
Dr. Matthew Erickson	Jennifer Shomaker	114 McKay Education Building	724-738-2085

Department Web Site URL (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/special-education/>)

Department Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/sped-fs.pdf>)

## Faculty

### Richael Barger-Anderson

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M.S., Clarion University  
B.S., Clarion University

### Eric Bieniek

Associate Professor  
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Ph.D., Robert Morris University  
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B.A., Edinboro University

### Natalie Burick

Instructor  
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D.E.D., Indiana University of PA  
M.E.D., Slippery Rock University  
B.S., Slippery Rock University

### Matthew Erickson

Professor  
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M.Ed., California University of Pennsylvania  
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### Jessica Hall-Wirth

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### Katie Leckenby

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### Jeremy Lynch

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Ed.D., West Virginia University  
M.A., West Virginia University  
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### Sararose Lynch

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### Joseph Merhaut

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### Toni Mild

Assistant Professor  
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**Dorotha Monfore**

Assistant Professor  
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M.Ed., University of North Texas  
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**Ashlea Rineer-Hershey**

Associate Professor  
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M.A., Eastern Mennonite University  
B.S., Millersville University of Pennsylvania

**Anne Rose**

Assistant Professor  
Special Education  
Ph.D., University of Pittsburgh  
M.A., Chatham University  
B.S., Geneva College

**Annessa Steele**

Instructor  
Special Education  
D.Ed., Slippery Rock University  
M.Ed., Slippery Rock University  
B.A., University of Michigan

**Christopher Tarr**

Instructor  
Special Education

## Programs

### Majors

- Early Childhood Education (PK-4)/Special Education (PK-12), Bachelor of Science in Education (BSED) (p. 249)
- Early Childhood Education (PK-4)/Special Education (PK-12), Bachelor of Science in Education (BSED) - Concentration in International Education (p. 252)
- Special Education (K-12), Bachelor of Science in Education (BSED) (p. 257)
- Special Education Transition Programming, Bachelor of Science (BS) (p. 260)

### Minors

- Special Education, Minor (p. 262)

## Courses

**SPED 121 - Overview of Special Education**

The purpose of this course is to provide a broad overview of the terminology, strategies, and issues commonly encountered when addressing the needs of exceptional individuals. This course takes a multidisciplinary approach that begins with an introduction to the history of special education and important legislation, followed by discussion of individual areas of exceptionalities. Emphasis will be placed on etiology, identification, assessment treatment and social issues and concerns.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**SPED 122 - Low Incidence Disabilities**

This course will examine best practice and policies relating to the educational consequences of low-incidence disabilities. An emphasis on deafness, blindness, deaf-blindness, severe disability and multiple disability will occur. Placement and accommodation issues in integrated educational settings will also be a focus.

Prerequisite: SPED 121<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**SPED 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**SPED 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SPED 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**SPED 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SPED 220 - The Nature and Needs of Autism Spectrum Disorders**

This course will focus on an understanding of the characteristics of Autism Spectrum Disorders (ASD) and the implications for individual's lifespan. The course will explore the latest research on potential causes, best practices for assessment and intervention, as well as current legal and ethical issues related to autism services.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**SPED 222 - Introduction to Special Education Law**

In this course, students will discuss genesis of special education by way of litigation and resulting legislation as rooted in the Civil Rights Movement of the 1960's, PL 94-142, and the inception of IDEA Part A-D. An overview of PA Chapter 14 and its relation to IDEA, Chapter 15 and ADA, along with Chapter 16. Students will also explore LRE, compliance, and professional ethics and standards.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**SPED 230 - Early Intervention Practices for Students with Disabilities**

In this course, students will identify the critical components of an educational program for early learners with disabilities and medical diagnosis including: curricular areas, early interventions and effective teaching techniques, use of appropriated materials, transition to school age regarding Part C of IDEA, related services and personnel, parental involvement, assistive technology and inclusionary practices.

Prerequisite: SPED 121<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

**SPED 245 - Technology in Special Education**

Candidates will develop the use of technologies to assist in the teaching, remediation, assessment and enrichment of students with special needs in inclusive traditional and/or cyber classrooms. The goal is to help pre-service teachers implement instructional and assistive technology effectively. This course will also provide a framework for utilizing educational technology to meet the individualized needs of students.

Prerequisite: SPED 121<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1 or Freshman 2 may **not** enroll.

**SPED 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SPED 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**SPED 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SPED 302 - Developmental Disabilities**

The learner will identify the critical components of an educational program for persons who have mental retardation classified as moderate, severe, or profound including: curricular areas, effective teaching techniques, appropriate materials, team approaches, ancillary services, parental involvement and inclusionary practices. Includes a lab of three contact hours per week with students who have severe and/or multiple disabilities.

Prerequisites: (SPED 202<sup>D</sup> or SPED 122<sup>D</sup>) and (SPED 203<sup>D</sup> or SPED 121<sup>D</sup> or SPED 100<sup>D</sup>) and (SPED 204<sup>D</sup> or SPED 230<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPED 315 - Special Education Issues in Diverse Secondary Classrooms**

This course is designed to familiarize secondary education majors with the various behavioral problems they may encounter in the inclusive classroom. Suggestions are given for ameliorating these problems, as well as successfully organizing the classroom and classroom routine. Three units of study will be explored. The three units are: 1) Classroom management with a focus on dealing with students with special needs, 2) Legal issues for secondary teachers, 3) Impact of exceptionalities in inclusive settings.

Corequisite(s): SPED 455

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPED 341 - Transition Across the Lifespan**

This course is designed to provide students with a life management perspective for educating persons with disabilities in an inclusive setting. This course prepares students to apply the foundational principles of special education for meeting the major developmental needs of persons with disabilities from early infancy to adulthood. This course is designed to provide the undergraduate student with a foundation for the understanding of the major developmental needs and community requirements for individuals with disabilities.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**SPED 342 - Building Community Partnerships**

This course focuses on the multi-dimensional role of service provider to individuals with disabilities. In addition to hands-on experiences with service agencies, students enrolled in this course will interact with service providers, supervisors, related service personnel parents and caretakers. Students will learn how to take on all roles of a service provider and implement effective programming to address all the needs of a client(s). Students will become skilled in matching student needs with appropriate transition programming as well as identifying personnel key in providing necessary services.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Comm Prgms Amer with Disabil, Comm Prg Am Dis-Adap Phys Actv, Comm Prg Am Dis-Non-Prft Mgmt or SPED Transition Programming.

**SPED 343 - Americans with Disabilities**

This course will provide background for understanding how disabling conditions may handicap a person in terms of jobs, marriage, and family life, housing and transportation and citizenship. The course stresses how everyone is involved in determining the success or failure of the disabled in society. An historical overview of society's treatment of the disabled will be contrasted with recent legislation and the emerging roles of the disabled in American society. The impact of special education on the disabled person, the parents, siblings, employers, neighbors, and peers will be presented.

Credits: 3

Term(s) Typically Offered: Offered Fall, Winter, & Spring

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPED 346 - Assessment in Transition Planning**

This course introduces the student to the assessments utilized for evaluation of students at all levels of transition planning, spanning from school readiness assessments to transition planning for the secondary level. Students will learn to identify appropriate assessment based on student needs as well as how to administer and score evaluation data. In addition, the course will guide students in reviewing and interpreting assessment data to determine appropriate transition planning to address student needs. The course will also identify the major litigation and legislation that have significantly influenced the nature of service to exceptional populations in the area of transition planning and assessment of their needs.

Prerequisites: SPED 121<sup>C</sup> and SPED 122<sup>C</sup> and SPED 230<sup>C</sup> and SPED 341<sup>C</sup> and SPED 342<sup>C</sup> and SPED 343<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment is limited to students with a program in SPED Transition Programming.

**SPED 347 - Management & Leadership**

This is an advanced level course that expands students' knowledge in skills necessary to take on leadership and management roles in the secondary transition planning level. Students will be required to engage in professional organizations at the state and local level. Students will learn to identify how to develop an effective system for service delivery to clients. Additional, an emphasis will be placed on current funding sources in the nation and state as well as how to manage necessary paperwork for obtaining funding necessary to run appropriate transition programs for children and adults of transition age.

Prerequisites: SPED 121<sup>C</sup> and SPED 122<sup>C</sup> and SPED 230<sup>C</sup> and SPED 341<sup>C</sup> and SPED 342<sup>C</sup> and SPED 343<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment is limited to students with a program in SPED Transition Programming.

**SPED 350 - Universal Intervention**

In this course, student will identify the critical components of Tier 1 in the Multi-Tiered System of Support (MTSS) for learners with and without disabilities including: universal interventions, best practices, screening, progressing monitoring, classroom management, PBIS, collaboration, co-teaching, SDI and accommodations and inclusionary practices.

Prerequisite: SPED 121<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): ELEC 311

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SPED 353 - Teaching in an Area of High Need**

In this course, we will discuss the problem of over representation of individuals from diverse backgrounds in special education and the racial, cultural, and economic concerns of school systems and communities (both domestically and abroad) trying to narrow the opportunity/achievement gap for students. During the semester, students will be analyzing some of the historical, socioeconomic, and political factors school systems in areas of high need confront. Specifically, students will investigate effective instructional and organizational practices, examine home-school connections, and identify possible disparities in available resources for urban and rural schools.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Sophomore 1 or Sophomore 2.

**SPED 360 - Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners**

In this course, students will identify the critical components of Tier II in the Multi-Tiered System of Support (MTSS) for learners with and without disabilities including: data-based decision making, evidenced based practices, supplemental and intensive programming, differentiated instruction and assessment. These concepts will be explored within the scopes of academic and behavioral supports for exceptional learners.

Corequisite(s): ELEC 420

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Early Childhood Ed (PK-4), Early Child/Spec Ed(PK-4)PK-8), Early Child/Spec Ed(PK-4)PK-12, Special Education (PK-12) or Exceptionalities.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SPED 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPED 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPED 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPED 410 - Transition Practicum**

The practicum course focuses on developing skills in collaboration, consultation and teaming to prepare pre-service Transition Specialist students for entry into a multi-disciplinary and multi-dimensional role of services provider to individuals with disabilities. In addition to hands-on experience with service agencies, Transition Specialist students enrolled in this course will interact with clients, service providers, agency supervisors, related service personnel and care takers.

Prerequisites: SPED 121<sup>D</sup> and SPED 122<sup>D</sup> and SPED 230<sup>D</sup> and SPED 341<sup>D</sup> and SPED 342<sup>D</sup> and SPED 343<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPED 431 - Intense Behavioral and Emotional Interventions for Neuro-Diverse Learners**

In this course, students will identify the critical components of Tier III Emotional and Behavioral Interventions within the Multi-Tiered System of Support (MTSS) for learners with and without disabilities including: overview of severe behavior. Functional Behavioral Assessment (FBA), use of evidenced based interventions to support challenging behavior, develop more age appropriate social and emotional skills, application of effective preventative and environmental planning to limit problem behaviors as well as understanding the acting out cycle, trauma informed care and legal implications surrounding challenging behaviors in today's schools.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SPED 432 - Intensive ELA Interventions for Neuro-Diverse Learners**

This course in Special Education is designed for the teacher candidate seeking certification in K-12 Special Education. This course will focus on reading and writing interventions. Students will gain experience with a variety of strategies and interventions to use with various levels of special education needs in the regular education classroom & in pull-out placements. This course will examine effective instructional practices and delivery methods for intensive levels of special education support (K-12) in both the inclusionary and resource settings.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SPED 433 - Assessment Strategies in Special Education**

This course is designed to provide undergraduate students with the skills and knowledge necessary to conduct educational assessment of diverse students and interpret assessment results in order to plan an educational program (i.e., determine eligibility and develop an individualized education program).

Prerequisites: SPED 121<sup>D</sup> and SPED 122<sup>D</sup> and SPED 230<sup>D</sup> and (SPED 325<sup>D</sup> or SPED 350<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SPED 434 - Professional Collaboration and Ethical Practices**

This course focuses on skills in consultation, collaboration and learning to prepare the pre-service teacher for the multidimensional role of today's special educator. In addition to hands-on experience in classrooms, students enrolled in this course will interact with special educators, parents, general educators, and resource personnel among others. Application of teaching techniques with children with disabilities under faculty and host teacher supervision will provide the pre-service teacher with an opportunity for experience in the special education classroom as well as inclusive settings prior to the student teaching experience.

Prerequisites: SPED 121<sup>D</sup> and SPED 122<sup>D</sup> and SPED 230<sup>D</sup> and (SPED 325<sup>D</sup> or SPED 350<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SPED 435 - Processes and Procedures in Special Education**

In this course, we will discuss special education legal documentation, including referral forms relating to Tier 1-3 interventions, the evaluation process, ER, IEP, procedural safeguards, NOREPs, and Transition. Emphasis will be placed on legally defensible IEP writing, mediation, due process, objective tone, and data collection.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SPED 436 - Intensive Mathematics Interventions for Neuro-Diverse Learners**

In this course, we will discuss instructional interventions and strategies that can be utilized in an intensive, Tier 3 type, setting to assist neuro-diverse learners in understanding mathematics concepts/topics. Particular emphasis will be placed on topics and remediation strategies frequently encountered within the Grade 4 to Algebra/Grade 9 levels.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SPED 440 - Seminar in Special Education**

The purpose of this seminar is to help pre-service special education teachers understand some of the challenges encountered during the first year of teaching, and provide strategies to help prepare them to overcome these challenges as they begin their first year of teaching.

Corequisite(s): SPED 455

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPED 450 - Transition Internship**

This 12 credit internship course focuses on advancing skills in collaboration, consultation and teaming to prepare pre-service students for entry into a multi-disciplinary and multi-dimensional role of services provider to individuals with disabilities. Students set up their own internship sites with guidance and approval from their advisor. This hands-on experience with service agencies makes up 480 hours of time in the field. Transition Specialist students enrolled in this course will interact with clients, service providers, agency supervisors, related service personnel and care takers.

Prerequisites: SPED 121<sup>D</sup> and SPED 202<sup>D</sup> and SPED 203<sup>D</sup> and SPED 204<sup>D</sup> and SPED 212<sup>D</sup> and (SPED 311<sup>D</sup> or SPED 313<sup>D</sup>) and SPED 400<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPED 455 - Student Teaching - Special Education**

Under the guidance of a cooperating teacher and university supervisor, students engage in two eight-week assignments on a full-time basis in specified school districts and attend scheduled seminars. Supervisors assign additional requirements.

Prerequisites: SPED 202<sup>D</sup> and SPED 203<sup>D</sup> and SPED 204<sup>D</sup> and SPED 212<sup>D</sup> and SPED 314<sup>D</sup> and SPED 302<sup>D</sup> and SPED 306<sup>D</sup> and SPED 311<sup>D</sup> and SPED 312<sup>D</sup> and SPED 400<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3-12

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SPED 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPED 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPED 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Early Childhood Education (PK-4)/ Special Education (PK-12), Bachelor of Science in Education (BSED)

### Related Links

Early Childhood Education (PK-4)/Special Education (PK-12), BSED Program Page ([https://www.sru.edu/academics/majors-and-minors/early-childhood-\(pk-4\)/-special-education-\(k-8\)/](https://www.sru.edu/academics/majors-and-minors/early-childhood-(pk-4)/-special-education-(k-8)/))

Special Education Department Page (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/special-education/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

GPA must be 2.8 or higher for Teacher Candidacy.

A 3.0 GPA and passing subject area assessment (PECT) or a 2.8 GPA and a *qualifying* passing subject area assessment (PECT) score (as determined by PDE) is required for certification.

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	98

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 210	Mathematics for Elementary Teachers I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Additional Rock Studies 2 Requirements (12 credits)</b>		
SOWK 105	Human Diversity	3
SPED 121	Overview of Special Education <sup>2</sup>	3
PE 243	Educational Movement in Health & Wellness <sup>2</sup>	3
MATH 310	Mathematics for Elementary Teachers II <sup>2</sup>	3
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Indicates coursework required for the ELEC Major as per PA Dept. of Education Certification Policy.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 49 major credits must be taken at SRU or PASSHE
- 49 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Foundation Courses</b>		
ELEC 100	Early Childhood Education Theory & Practice <sup>1</sup>	3
ELEC 200	Child Development Typical <sup>1</sup>	3
ELEC 348	Leadership, Advocacy & Program Development <sup>1</sup>	3
PE 243	Educational Movement in Health & Wellness <sup>1</sup>	3
or DANC 223	Creative Dance for Children	
SPED 121	Overview of Special Education <sup>1</sup>	3
SPED 222	Introduction to Special Education Law	3
SPED 230	Early Intervention Practices for Students with Disabilities <sup>1</sup>	3
SPED 245	Technology in Special Education	3
Subtotal		24
<b>Diversity Block<sup>2</sup></b>		
ELEC 230	Field-Based Child Development Typical <sup>1</sup>	3
ELEC 237	ELL Strategies and Practice for Early Childhood Education <sup>1</sup>	3
ELEC 281	Family and Community Diversity and Partnerships <sup>1</sup>	3
Subtotal		9
<b>Early Literacy Block<sup>2</sup></b>		
ELEC 238	Literacy Practices for the Emergent Learner, PK-1 <sup>1</sup>	3
ELEC 285	Integrating Creative Expression through the Arts <sup>1</sup>	3
Subtotal		6
<b>Block 1<sup>3</sup></b>		
ELEC 311	Mathematics & Literacy Teaching Lab Pre K - 4 <sup>1</sup>	1
ELEC 316	Developmental Formal and Informal Assessments <sup>1</sup>	3
ELEC 330	Literacy Practices for the Developing Learner, Grades 2 - 4 <sup>1</sup>	3
ELEC 340	Mathematics Methods and Strategies for PRE K - 4 Teachers <sup>1</sup>	3
SPED 350	Universal Intervention	3
Subtotal		13
<b>Block 2<sup>3</sup></b>		
Must complete Block 1 first		
ELEC 420	Early Childhood Field Experience <sup>1</sup>	3
ELEC 460	Instructional Strategies for Science and Technology <sup>1</sup>	3
ELEC 470	Social Studies & Citizenship <sup>1</sup>	3
ELEC 480	Assessment for Differentiation of Literacy Instruction <sup>1</sup>	3
SPED 360	Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners	3
Subtotal		15

## Block 3

Must complete blocks 1 and 2 first		
SPED 431	Intense Behavioral and Emotional Interventions for Neuro-Diverse Learners <sup>1</sup>	3
SPED 432	Intensive ELA Interventions for Neuro-Diverse Learners <sup>1</sup>	3
SPED 433	Assessment Strategies in Special Education <sup>1</sup>	3
SPED 434	Professional Collaboration and Ethical Practices <sup>1</sup>	3
SPED 435	Processes and Procedures in Special Education	3
SPED 436	Intensive Mathematics Interventions for Neuro-Diverse Learners	3
Subtotal		18
<b>Student Teaching</b>		
All previously listed coursework must be completed prior to Student Teaching		
ELEC 455	Student Teaching: Early Childhood <sup>1</sup>	6
SPED 440	Seminar in Special Education	1
SPED 455	Student Teaching - Special Education <sup>1</sup>	6
or ELEC 475	International Student Teaching: Early Childhood	
Subtotal		13
<b>Total Hours</b>		<b>98</b>

- <sup>1</sup> Course counts for 50% of Major requirements but not for Major GPA
- <sup>2</sup> Diversity and Early Literacy blocks can be taken in any order, but not at the same time. You must enroll in all courses within the block.
- <sup>3</sup> Blocks 1, 2, and 3 must be taken in sequence and completed prior to Student Teaching. No two blocks below can be taken together. You must enroll in all courses within the block.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs
2. High-Impact Practice (HIP) designated classes
3. Student-Faculty research and Student Leadership development
4. Career Education and Development
5. Internships/Field Experiences
6. Student teaching (required)

## Important Information

### Prerequisites for Admission to Teacher Candidacy

- Grades below a "C" are not admissible.

Code	Title	Hours
<b>Basic Courses</b>		
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
Select one of the following:		
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	



POLS 235	Civil Discourse and Democracy	
ELEC 100	Early Childhood Education Theory & Practice	3
ELEC 200	Child Development Typical	3
ELEC 230	Field-Based Child Development Typical	3
<b>Math Requirement for BS in Education</b>		
Prior to Admission to Teacher Candidacy. Minimum grade of "D" required.		
MATH 210	Mathematics for Elementary Teachers I	3
MATH 310	Mathematics for Elementary Teachers II	3
<b>Total Hours</b>		<b>24</b>

### BSED Early Childhood (PK-4)/Special Education (PK-12) Grade Requirements

- Grades in each of the following courses must be "C" or better to qualify for Student Teaching and/or Graduation

Code	Title	Hours
ELEC 100	Early Childhood Education Theory & Practice	3
ELEC 200	Child Development Typical	3
ELEC 230	Field-Based Child Development Typical	3
ELEC 237	ELL Strategies and Practice for Early Childhood Education	3
ELEC 238	Literacy Practices for the Emergent Learner, PK-1	3
ELEC 281	Family and Community Diversity and Partnerships	3
ELEC 285	Integrating Creative Expression through the Arts	3
ELEC 311	Mathematics & Literacy Teaching Lab Pre K - 4	1
ELEC 316	Developmental Formal and Informal Assessments	3
ELEC 330	Literacy Practices for the Developing Learner, Grades 2 - 4	3
ELEC 340	Mathematics Methods and Strategies for PRE K - 4 Teachers	3
ELEC 348	Leadership, Advocacy & Program Development	3
ELEC 420	Early Childhood Field Experience	3
ELEC 455 or ELEC 475	Student Teaching: Early Childhood International Student Teaching: Early Childhood	12
ELEC 460	Instructional Strategies for Science and Technology	3
ELEC 470	Social Studies & Citizenship	3
ELEC 480	Assessment for Differentiation of Literacy Instruction	3
PE 243	Educational Movement in Health & Wellness	3
SPED 121	Overview of Special Education	3
SPED 222	Introduction to Special Education Law	3
SPED 230	Early Intervention Practices for Students with Disabilities	3
SPED 245	Technology in Special Education	3
SPED 350	Universal Intervention	3

SPED 360	Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners	3
SPED 431	Intense Behavioral and Emotional Interventions for Neuro-Diverse Learners	3
SPED 432	Intensive ELA Interventions for Neuro-Diverse Learners	3
SPED 433	Assessment Strategies in Special Education	3
SPED 434	Professional Collaboration and Ethical Practices	3
SPED 435	Processes and Procedures in Special Education	3
SPED 436	Intensive Mathematics Interventions for Neuro-Diverse Learners	3
SPED 440	Seminar in Special Education	1
SPED 455	Student Teaching - Special Education	3-12

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Early Childhood (PK-4)/Special Education (K-8) BSED - (1192)

Effective Fall 2021

Revised 07.09.2021

UCC 03.02.2021

### Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ELEC 100	Early Childhood Education Theory & Practice	3
SPED 121	Overview of Special Education	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ESAP 101	FIRST Seminar *	1
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ELEC 200	Child Development Typical	3
ENGL 104	Critical Reading	3
MATH 210	Mathematics for Elementary Teachers I	3
SPED 222	Introduction to Special Education Law	3
Humanities Inquiry (p. 29)		3
Social Science Inquiry (p. 29)		3
<b>Hours</b>		<b>18</b>

## Second Year

### Fall

SPED 230	Early Intervention Practices for Students with Disabilities	3
ELEC 230	Field-Based Child Development Typical	3
ELEC 237	ELL Strategies and Practice for Early Childhood Education	3
ELEC 281	Family and Community Diversity and Partnerships	3
SCI 101	Science of Life	3
MATH 310	Mathematics for Elementary Teachers II	3
<b>Hours</b>		<b>18</b>

### Spring

ELEC 238	Literacy Practices for the Emergent Learner, PK-1	3
ELEC 285	Integrating Creative Expression through the Arts	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
SCI 102	Understanding the Physical World	3
SOWK 105	Human Diversity	3
SPED 245	Technology in Special Education	3
<b>Hours</b>		<b>18</b>

## Third Year

### Fall

PE 243	Educational Movement in Health & Wellness	3
ELEC 311	Mathematics & Literacy Teaching Lab Pre K - 4	1
ELEC 316	Developmental Formal and Informal Assessments	3
ELEC 330	Literacy Practices for the Developing Learner, Grades 2 - 4	3
ELEC 340	Mathematics Methods and Strategies for PRE K - 4 Teachers	3
SPED 350	Universal Intervention	3
<b>Hours</b>		<b>16</b>

### Spring

ELEC 348	Leadership, Advocacy & Program Development	3
ELEC 420	Early Childhood Field Experience	3
ELEC 460	Instructional Strategies for Science and Technology	3
ELEC 470	Social Studies & Citizenship	3
ELEC 480	Assessment for Differentiation of Literacy Instruction	3
SPED 360	Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners	3
<b>Hours</b>		<b>18</b>

## Fourth Year

### Fall

SPED 431	Intense Behavioral and Emotional Interventions for Neuro-Diverse Learners	3
SPED 432	Intensive ELA Interventions for Neuro-Diverse Learners	3
SPED 433	Assessment Strategies in Special Education	3
SPED 434	Professional Collaboration and Ethical Practices	3
SPED 435	Processes and Procedures in Special Education	3
SPED 436	Intensive Mathematics Interventions for Neuro-Diverse Learners	3
<b>Hours</b>		<b>18</b>

### Spring

ELEC 455	Student Teaching: Early Childhood	6
SPED 440	Seminar in Special Education	1
SPED 455 or ELEC 475	Student Teaching - Special Education or International Student Teaching: Early Childhood	6
<b>Hours</b>		<b>13</b>
<b>Total Hours**</b>		<b>135</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 1192  
Revised: 09.20.2021

# Early Childhood Education (PK-4)/ Special Education (PK-12), Bachelor of Science in Education (BSED) - Concentration in International Education

Students who elect to complete Early Childhood Ed (PK-4)/Special Education (PK-12) - International Education will choose from already established rock studies courses that focus on international and global perspectives. They will also complete a care break, spring break trip, or field experience in an international setting. The capstone will be the completion of an international student teaching experience.

All candidates completing this program and student teaching are eligible to receive Pennsylvania certification after achieving a passing or qualifying score on Pennsylvania Department of Education required exam(s). If you are interested in teaching in another state, please contact the Department of Education in that state.

The mission of the International concentration is to equip, inspire and empower teacher candidates by providing them opportunities to develop their personal and professional global awareness; to deepen their understanding of culturally responsive teaching and to experience international teaching in order to be prepared for teaching in the 21<sup>st</sup> century.

## Related Links

Early Childhood Education (PK-4)/Special Education (PK-12) - International Education, BSED Program Page (<https://www.sru.edu/academics/majors-and-minors/early-childhood/-special-education-international-education/>)

Special Education Department Page (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/special-education/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

- GPA must be 2.8 or higher for Teacher Candidacy.
- A 3.0 GPA and passing subject area assessment (PECT) or A 2.8 GPA and a *qualifying* passing subject area assessment (PECT) score (as determined by PDE) is required for certification.
- Students must complete 50% of credits required for the Major from a PASSHE university.

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	98

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 210	Mathematics for Elementary Teachers I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		

Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Additional Rock Studies 2 Requirements (12 credits)</b>		
MATH 310	Mathematics for Elementary Teachers II <sup>2</sup>	3
PE 243	Educational Movement in Health & Wellness <sup>2</sup>	3
SPED 121	Overview of Special Education <sup>2</sup>	3
Select one of the following:		3
GES 201	Latin America and the Caribbean	
HIST 351	Latin America to 1830	
HIST 352	Latin America Since 1830	
POLS 370	Latin American Politics and Development	
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Required as per PA Department of Education Certification Policy.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

### Major Requirements

- 49 major credits must be taken at SRU or PASSHE
- 49 major credits must be taken at the 300 level or above

Code	Title	Hours	Must complete Blocks 1 and 2 first	
<b>Early Childhood Education Courses</b>			SPED 431	Intense Behavioral and Emotional Interventions for Neuro-Diverse Learners <sup>1,2</sup> 3
ELEC 100	Early Childhood Education Theory & Practice <sup>1,2</sup>	3	SPED 432	Intensive ELA Interventions for Neuro-Diverse Learners <sup>1,2</sup> 3
ELEC 200	Child Development Typical <sup>1,2</sup>	3	SPED 433	Assessment Strategies in Special Education <sup>1,2</sup> 3
ELEC 405	Overview of and Immersion in Global Education <sup>1,2</sup>	3	SPED 434	Professional Collaboration and Ethical Practices <sup>1,2</sup> 3
PE 243	Educational Movement in Health & Wellness <sup>1</sup>	3	SPED 435	Processes and Procedures in Special Education 3
or DANC 223	Creative Dance for Children		SPED 436	Intensive Mathematics Interventions for Neuro-Diverse Learners 3
SPED 121	Overview of Special Education <sup>1,2</sup>	3	Subtotal	18
SPED 222	Introduction to Special Education Law	3	<b>Student Teaching</b>	
SPED 230	Early Intervention Practices for Students with Disabilities <sup>1,2</sup>	3	All previously listed coursework must be completed prior to Student Teaching	
SPED 245	Technology in Special Education	3	ELEC 455	Student Teaching: Early Childhood <sup>1,2,3</sup> 6
Subtotal		24	or ELEC 475	International Student Teaching: Early Childhood 6
<b>Diversity Block</b>			SPED 440	Seminar in Special Education 1
ELEC 230	Field-Based Child Development Typical <sup>1,2</sup>	3	SPED 455	Student Teaching - Special Education <sup>1,2</sup> 6
ELEC 237	ELL Strategies and Practice for Early Childhood Education <sup>1,2</sup>	3	Other: Must complete 1 spring break, care break, or early field experience in an international setting	
ELEC 281	Family and Community Diversity and Partnerships <sup>1,2</sup>	3	Subtotal	13
Subtotal		9	<b>Total Hours</b>	
<b>Early Literacy Block</b>				
ELEC 238	Literacy Practices for the Emergent Learner, PK-1 <sup>1,2</sup>	3	<sup>1</sup> Course counts for 50% of Major requirements but not for Major GPA	
ELEC 285	Integrating Creative Expression through the Arts <sup>1,2</sup>	3	<sup>2</sup> Grade of "C" or better must be earned in this course to qualify for Student Teaching and/or graduation.	
Subtotal		6	<sup>3</sup> Students not in the International Track may still student teach abroad.	
<b>Early Childhood Major Courses</b>			* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.	
Must be admitted to College of Education and complete both Diversity and Literacy Blocks.			<b>Co-curricular and Experiential Learning</b>	
<b>Block 1</b>			Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:	
ELEC 311	Mathematics & Literacy Teaching Lab Pre K - 4 <sup>1,2</sup>	1	1. International study programs	
ELEC 316	Developmental Formal and Informal Assessments <sup>1,2</sup>	3	2. High-Impact Practice (HIP) designated classes	
ELEC 330	Literacy Practices for the Developing Learner, Grades 2 - 4 <sup>1,2</sup>	3	3. Student-Faculty research and Student Leadership development	
ELEC 340	Mathematics Methods and Strategies for PRE K - 4 Teachers <sup>1,2</sup>	3	4. Career Education and Development	
SPED 350	Universal Intervention	3	5. Internships/Field Experiences	
Subtotal		13	6. Student teaching (required)	
<b>Block 2</b>			<b>Important Information</b>	
Must complete Block 1 first			<b>Prerequisites for Admission to Teacher Candidacy</b>	
ELEC 420	Early Childhood Field Experience <sup>1,2</sup>	3	• Minimum grade of "C" required.	
ELEC 460	Instructional Strategies for Science and Technology <sup>1,2</sup>	3	<b>Code Title Hours</b>	
ELEC 470	Social Studies & Citizenship <sup>1,2</sup>	3	<b>Basic Courses</b>	
ELEC 480	Assessment for Differentiation of Literacy Instruction <sup>1,2</sup>	3	Select one of the following: 3	
SPED 360	Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners	3	COMM 200	Civil Discourse: Theory & Practice
Subtotal		15	PHIL 110	Ethics and Civil Discourse
<b>Block 3</b>				

POLS 235	Civil Discourse and Democracy	
ELEC 100	Early Childhood Education Theory & Practice	3
ELEC 200	Child Development Typical	3
ELEC 230	Field-Based Child Development Typical	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
<b>Math Requirement for BS in Education</b>		
Prior to Admission to Teacher Candidacy		
Minimum grade of "D" required.		
MATH 210	Mathematics for Elementary Teachers I	3
MATH 310	Mathematics for Elementary Teachers II	3
<b>Total Hours</b>		<b>24</b>

### BS/ED Early Childhood (PK-4)/Special Education (PK-12) Grade Requirements

- Grades in each of the following courses must be "C" or better to qualify for Student Teaching and/or Graduation

Code	Title	Hours
ELEC 100	Early Childhood Education Theory & Practice	3
ELEC 200	Child Development Typical	3
ELEC 230	Field-Based Child Development Typical	3
ELEC 237	ELL Strategies and Practice for Early Childhood Education	3
ELEC 238	Literacy Practices for the Emergent Learner, PK-1	3
ELEC 281	Family and Community Diversity and Partnerships	3
ELEC 285	Integrating Creative Expression through the Arts	3
ELEC 311	Mathematics & Literacy Teaching Lab Pre K - 4	1
ELEC 316	Developmental Formal and Informal Assessments	3
ELEC 330	Literacy Practices for the Developing Learner, Grades 2 - 4	3
ELEC 340	Mathematics Methods and Strategies for PRE K - 4 Teachers	3
ELEC 405	Overview of and Immersion in Global Education	3
ELEC 420	Early Childhood Field Experience	3
ELEC 455 or ELEC 475	Student Teaching: Early Childhood International Student Teaching: Early Childhood	12
ELEC 460	Instructional Strategies for Science and Technology	3
ELEC 470	Social Studies & Citizenship	3
ELEC 480	Assessment for Differentiation of Literacy Instruction	3
PE 243	Educational Movement in Health & Wellness	3
SPED 121	Overview of Special Education	3
SPED 222	Introduction to Special Education Law	3
SPED 230	Early Intervention Practices for Students with Disabilities	3

SPED 245	Technology in Special Education	3
SPED 350	Universal Intervention	3
SPED 360	Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners	3
SPED 431	Intense Behavioral and Emotional Interventions for Neuro-Diverse Learners	3
SPED 432	Intensive ELA Interventions for Neuro-Diverse Learners	3
SPED 433	Assessment Strategies in Special Education	3
SPED 434	Professional Collaboration and Ethical Practices	3
SPED 435	Processes and Procedures in Special Education	3
SPED 436	Intensive Mathematics Interventions for Neuro-Diverse Learners	3
SPED 440	Seminar in Special Education	1
SPED 455	Student Teaching - Special Education	3-12

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Early Childhood Education PK-4 - BS/ED (1192)

Concentration in International (INTE)

This program is effective as of Fall 2019.

Revised 07.09.2021

UCC 03.02.2021

### Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ELEC 100	Early Childhood Education Theory & Practice	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SPED 121	Overview of Special Education	3
SCI 101	Science of Life	3
SUBJ 139	Foundations of Academic Discovery	
Rock Studies 2 Requirements (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ELEC 200	Child Development Typical	3
ENGL 104	Critical Reading	3
MATH 210	Mathematics for Elementary Teachers I	3
SPED 222	Introduction to Special Education Law	3
Rock Studies 2 Requirements (p. 29)		3



Rock Studies 2 Requirements (p. 29)	3
<b>Hours</b>	<b>18</b>

## Second Year

### Fall

#### Diversity Block

Civil Discourse - Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
ELEC 230	Field-Based Child Development Typical <sup>2</sup>	3
ELEC 237	ELL Strategies and Practice for Early Childhood Education <sup>2</sup>	3
ELEC 281	Family and Community Diversity and Partnerships <sup>2</sup>	3
MATH 310	Mathematics for Elementary Teachers II	3
SPED 230	Early Intervention Practices for Students with Disabilities	3
<b>Hours</b>		<b>18</b>

### Spring

#### Early Literacy Block

ELEC 238	Literacy Practices for the Emergent Learner, PK-1 <sup>2</sup>	3
ELEC 285	Integrating Creative Expression through the Arts <sup>2</sup>	3
PE 243 or DANC 223	Educational Movement in Health & Wellness or Creative Dance for Children	3
SPED 245	Technology in Special Education	3
Rock Studies 2 Requirements (p. 29)		2-3
Rock Studies 2 Requirements (p. 29)		3
<b>Hours</b>		<b>17-18</b>

## Third Year

### Fall

#### Block I

ELEC 311	Mathematics & Literacy Teaching Lab Pre K - 4	1
ELEC 316	Developmental Formal and Informal Assessments	3
ELEC 330	Literacy Practices for the Developing Learner, Grades 2 - 4	3
ELEC 340	Mathematics Methods and Strategies for PRE K - 4 Teachers	3
ELEC 405	Overview of and Immersion in Global Education	3
SPED 350	Universal Intervention	3
Rock Studies 2 Requirements (p. 29)		3
Rock Studies 2 Requirements (p. 29)		3
<b>Hours</b>		<b>22</b>

### Spring

#### Block II

ELEC 420	Early Childhood Field Experience	3
ELEC 460	Instructional Strategies for Science and Technology	3
ELEC 470	Social Studies & Citizenship	3

ELEC 480	Assessment for Differentiation of Literacy Instruction <sup>2,5</sup>	3
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SPED 360	Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners	3
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Rock Studies 2 Requirements (p. 29)		3
<b>Hours</b>		<b>18</b>

## Fourth Year

### Fall

#### SPED ProSem

SPED 435	Processes and Procedures in Special Education	3
SPED 436	Intensive Mathematics Interventions for Neuro-Diverse Learners	3
SPED 431	Intense Behavioral and Emotional Interventions for Neuro-Diverse Learners	3
SPED 432	Intensive ELA Interventions for Neuro-Diverse Learners	3
SPED 433	Assessment Strategies in Special Education	3
SPED 434	Professional Collaboration and Ethical Practices	3
Rock Studies 2 Requirements (p. 29)		3
<b>Hours</b>		<b>21</b>

### Spring

#### Student Teaching

ELEC 455	Student Teaching: Early Childhood	6
SPED 440	Seminar in Special Education	1
SPED 455 or ELEC 475	Student Teaching - Special Education (Ireland/Mexico) or International Student Teaching: Early Childhood	6
<b>Hours</b>		<b>13</b>

<b>Total Hours**</b>		<b>143-144</b>
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<sup>2</sup> Early Literacy and Diversity Block can be done either semester. Blocks I and II must be completed in sequence.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* Must complete 1 spring break, care break\*\*, or early field experience in an international setting.

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

Major Code: 1192

Concentration: INTE

Revised date: 09.20.2021

# Special Education (K-12), Bachelor of Science in Education (BSED)

## Related Links

Special Education (K-12), BSED Program Page ([https://www.sru.edu/academics/majors-and-minors/special-education-\(k-12\)/](https://www.sru.edu/academics/majors-and-minors/special-education-(k-12)/))

Special Education Department Website (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/special-education/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

GPA must be 2.8 or higher for Teacher Candidacy.

A 3.0 GPA and passing subject area assessment (PECT) or a 2.8 GPA and a *qualifying* passing subject area assessment (PECT) score (as determined by PDE) is required for certification,

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	84

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 210	Mathematics for Elementary Teachers I <sup>2</sup>	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

#### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3

Subtotal		15
<b>Additional Rock Studies 2 Requirements (12 credits)</b>		
MATH 310	Mathematics for Elementary Teachers II <sup>2</sup>	3
PE 243	Educational Movement in Health & Wellness <sup>2</sup>	3
SOWK 105	Human Diversity	3
SPED 121	Overview of Special Education <sup>2</sup>	3
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Required as per PA Department of Education Certification Policy.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

### Major Requirements

- 39 major credits must be taken at SRU or PASSHE
- 39 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Foundation Courses</b>		
ELEC 200	Child Development Typical	3
PE 243	Educational Movement in Health & Wellness <sup>2</sup>	3
or DANC 223	Creative Dance for Children	
SPED 121	Overview of Special Education <sup>2</sup>	3
SPED 222	Introduction to Special Education Law	3

SPED 230	Early Intervention Practices for Students with Disabilities	3
SPED 245	Technology in Special Education	3
Subtotal <sup>2</sup>		18

**ELEC Courses**

ELEC 230	Field-Based Child Development Typical	3
ELEC 237	ELL Strategies and Practice for Early Childhood Education	3
ELEC 238	Literacy Practices for the Emergent Learner, PK-1	3
ELEC 281	Family and Community Diversity and Partnerships	3
Subtotal		12

**Block 1**

Block 1 must be taken before Special Education Core courses and you must enroll in all courses within the block

ELEC 311	Mathematics & Literacy Teaching Lab Pre K - 4	1
ELEC 316	Developmental Formal and Informal Assessments	3
ELEC 330	Literacy Practices for the Developing Learner, Grades 2 - 4	3
ELEC 340	Mathematics Methods and Strategies for PRE K - 4 Teachers	3
SPED 350	Universal Intervention	3
Subtotal		13

**Special Education Core**

SPED 360	Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners	3
SPED 431	Intense Behavioral and Emotional Interventions for Neuro-Diverse Learners	3
SPED 432	Intensive ELA Interventions for Neuro-Diverse Learners	3
SPED 433	Assessment Strategies in Special Education	3
SPED 434	Professional Collaboration and Ethical Practices	3
SPED 435	Processes and Procedures in Special Education	3
SPED 436	Intensive Mathematics Interventions for Neuro-Diverse Learners	3
Subtotal		21

**Education Electives**

Select seven credits from the following:		7
ELEC 410	Culture and Politics of American Education	
SEFE 420	American Education in the Twenty-First Century: A Comparative Perspective	
SPAN 110	Spanish for Educators	
SPED 220	The Nature and Needs of Autism Spectrum Disorders	
SPED 341	Transition Across the Lifespan	
SPED 343	Americans with Disabilities	
SPED 353	Teaching in an Area of High Need	
Subtotal		7

**Student Teaching**

All previously listed coursework must be completed prior to Student Teaching

SPED 440	Seminar in Special Education	1
SPED 455	Student Teaching - Special Education	12
Subtotal		13

**Total Hours** **84**

<sup>1</sup> ELEC courses required by PDE Guidelines for Special Education Certification

<sup>2</sup> Course required as part of Rock Studies 2 Program and major requirements. Course credits count in Rock Studies 2 only.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**Important Information****Prerequisites for Admission to Teacher Candidacy**

- Grades below a "C" are not admissible.

Code	Title	Hours
<b>Basic Courses</b>		
ENGL 102	Critical Writing	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
SPED 121	Overview of Special Education	3
ELEC 200	Child Development Typical	3
ELEC 230	Field-Based Child Development Typical	3
ENGL 104	Critical Reading	3

**Math Requirement for BS in Education**

Prior to Admission to Teacher Candidacy. Minimum grade of "D" required.

MATH 210	Mathematics for Elementary Teachers I	3
MATH 310	Mathematics for Elementary Teachers II	3

**Total Hours** **24**

**Special Education (PK-12) Grade Requirements**

- Grades in each of the following courses must be "C" or better to qualify for Student Teaching and/or Graduation

Code	Title	Hours
ELEC 200	Child Development Typical	3
ELEC 230	Field-Based Child Development Typical	3
ELEC 237	ELL Strategies and Practice for Early Childhood Education	3
ELEC 238	Literacy Practices for the Emergent Learner, PK-1	3
ELEC 281	Family and Community Diversity and Partnerships	3
ELEC 311	Mathematics & Literacy Teaching Lab Pre K - 4	1
ELEC 316	Developmental Formal and Informal Assessments	3
PE 243	Educational Movement in Health & Wellness	3

SPED 121	Overview of Special Education	3
SPED 222	Introduction to Special Education Law	3
SPED 230	Early Intervention Practices for Students with Disabilities	3
SPED 245	Technology in Special Education	3
SPED 350	Universal Intervention	3
SPED 360	Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners	3
SPED 432	Intensive ELA Interventions for Neuro-Diverse Learners	3
SPED 433	Assessment Strategies in Special Education	3
SPED 434	Professional Collaboration and Ethical Practices	3
SPED 435	Processes and Procedures in Special Education	3
SPED 436	Intensive Mathematics Interventions for Neuro-Diverse Learners	3
SPED 440	Seminar in Special Education	1
SPED 455	Student Teaching - Special Education	3-12

Special Education (K-12) BSSED - (17)

Effective Fall 2020

Revised 11.20.20

UCC 10.27.20

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
SPED 121	Overview of Special Education	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
	Creative & Aesthetic Inquiry (p. 29)	3
	Humanities Inquiry (p. 29)	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
SPED 222	Introduction to Special Education Law	3
ELEC 200	Child Development Typical	3
ENGL 104	Critical Reading	3
SCI 101	Science of Life	3

SOWK 105	Human Diversity	3
<b>Hours</b>		<b>15</b>

### Second Year

#### Fall

SPED 230	Early Intervention Practices for Students with Disabilities	3
ELEC 230	Field-Based Child Development Typical	3
ELEC 237	ELL Strategies and Practice for Early Childhood Education	3
ELEC 281	Family and Community Diversity and Partnerships	3
MATH 210	Mathematics for Elementary Teachers I	3
<b>Hours</b>		<b>15</b>

#### Spring

PE 243 or DANC 223	Educational Movement in Health & Wellness or Creative Dance for Children	3
ELEC 238	Literacy Practices for the Emergent Learner, PK-1	3
MATH 310	Mathematics for Elementary Teachers II	3
SCI 102	Understanding the Physical World	3
Social Science Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>

### Third Year

#### Fall

Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
ELEC 311	Mathematics & Literacy Teaching Lab Pre K - 4	1
ELEC 316	Developmental Formal and Informal Assessments	3
ELEC 330	Literacy Practices for the Developing Learner, Grades 2 - 4	3
ELEC 340	Mathematics Methods and Strategies for PRE K - 4 Teachers	3
SPED 350	Universal Intervention	3
<b>Hours</b>		<b>16</b>

#### Spring

SPED 245	Technology in Special Education	3
SPED 360	Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners	3
Electives		3
Electives		3
Electives		1-3
<b>Hours</b>		<b>13-15</b>

### Fourth Year

#### Fall

SPED 431	Intense Behavioral and Emotional Interventions for Neuro-Diverse Learners	3
SPED 432	Intensive ELA Interventions for Neuro-Diverse Learners	3

SPED 433	Assessment Strategies in Special Education	3
SPED 434	Professional Collaboration and Ethical Practices	3
SPED 435	Processes and Procedures in Special Education	3
SPED 436	Intensive Mathematics Interventions for Neuro-Diverse Learners	3
<b>Hours</b>		<b>18</b>
<b>Spring</b>		
SPED 440	Seminar in Special Education	1
SPED 455	Student Teaching - Special Education	12
<b>Hours</b>		<b>13</b>
<b>Total Hours**</b>		<b>121-123</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 17  
Revised 09.20.2021

## Special Education Transition Programming, Bachelor of Science (BS)

### Related Links

Special Education Transition Programming, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/special-education-transition-programming/>)

Special Education Department Page (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/special-education/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher  
Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	60
	Electives	18

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 210	Mathematics for Elementary Teachers I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Additional Rock Studies 2 Requirements (12 credits)</b>		
MATH 310	Mathematics for Elementary Teachers II <sup>2</sup>	3
PE 243	Educational Movement in Health & Wellness <sup>2</sup>	3
SOWK 105	Human Diversity	3
SPED 121	Overview of Special Education <sup>2</sup>	3
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> Indicates coursework required for the ELEC Major as per PA Dept. of Education Certification Policy.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>



## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Foundation Courses</b>		
SPED 121	Overview of Special Education <sup>1</sup>	3
SPED 122	Low Incidence Disabilities <sup>1</sup>	3
SPED 230	Early Intervention Practices for Students with Disabilities <sup>1</sup>	3
ELEC 200	Child Development Typical <sup>1</sup>	3
PE 227	Introduction to Adapted Physical Activity	3
<b>Core Professional Courses</b>		
SPED 220	The Nature and Needs of Autism Spectrum Disorders <sup>1</sup>	3
SPED 341	Transition Across the Lifespan <sup>1</sup>	3
SPED 342	Building Community Partnerships <sup>1</sup>	3
SPED 343	Americans with Disabilities <sup>1</sup>	3
PE 353	Adapted Physical Activity and Health Through the Lifespan	3
PE 485	Fundraising/Grant Writing in Adapted Physical Activity <sup>1</sup>	3
<b>Professional Semester Block</b>		
These courses are taken together during the semester before internship:		
SPED 245	Technology in Special Education <sup>1</sup>	3
SPED 346	Assessment in Transition Planning <sup>1</sup>	3
SPED 347	Management & Leadership <sup>1</sup>	3
SPED 410	Transition Practicum <sup>1</sup>	3
PE 460	Program Design in Adapted Physical Activity <sup>1</sup>	3
<b>Internship</b>		
SPED 450	Transition Internship <sup>1</sup>	12
<b>Total Hours</b>		<b>60</b>

<sup>1</sup> Course counts for 50% Major requirement and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research and student leadership development
4. Career education and development
5. Internships/Field Experiences
6. Student teaching (required)

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Special Education Transition Programming - BS (1793)

This program is effective as of Fall 2019.

Revised 10.28.2021

UCC 2.5.2019

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
SPED 121	Overview of Special Education	3
SUBJ 139	Foundations of Academic Discovery	3
Rock Studies 2 Requirements (p. 29)		6
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Civil Discourse - Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
SPED 122	Low Incidence Disabilities	3
Rock Studies 2 Requirements (p. 29)		9
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
ELEC 200	Child Development Typical	3
GERO 265	Aging and the Older Person	3

SPED 230	Early Intervention Practices for Students with Disabilities	3
SPED 343	Americans with Disabilities	3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
PE 227	Introduction to Adapted Physical Activity	3
NLPA 220	Introduction to Nonprofit Management	3
SPED 341	Transition Across the Lifespan	3
Elective		3
Rock Studies 2 Requirements (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
Elective		3
PE 485	Fundraising/Grant Writing in Adapted Physical Activity	3
PE 353	Adapted Physical Activity and Health Through the Lifespan	3
SPED 342	Building Community Partnerships	3
Global Community-Non-US Global		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Elective		3
ENGL 104	Critical Reading	3
NLPA 120	Civic Engagement and Community Decision-Making	3
SPED 220	The Nature and Needs of Autism Spectrum Disorders	3
Rock Studies 2 Requirements (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
PE 460	Program Design in Adapted Physical Activity	3
SPED 245	Technology in Special Education	3
SPED 346	Assessment in Transition Planning	3
SPED 347	Management & Leadership	3
SPED 410	Transition Practicum	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
SPED 450	Transition Internship	12
Elective		3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>120</b>

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

Major Code: 1793  
Concentration Code:

Revised date: 08/2018

## Special Education, Minor

In this minor program, students seeking to become educators and/or community-based program coordinators will learn strategies for working with individuals with a wide range of learning, mental, and physical, abilities and levels of functioning in both the classroom and community-based settings.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Special Education, Minor Program Page ([https://www.sru.edu/academics/majors-and-minors/special-education-\(minor\)/](https://www.sru.edu/academics/majors-and-minors/special-education-(minor)/))

Special Education Department Page (<https://www.sru.edu/academics/colleges-and-departments/coe/departments/special-education/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits

Code	Title	Hours
<b>Foundation Courses</b>		
SPED 121	Overview of Special Education	3
SPED 222	Introduction to Special Education Law	3
<b>Elective Courses</b>		
Select four of the following:		12
SPED 220	The Nature and Needs of Autism Spectrum Disorders	
SPED 230	Early Intervention Practices for Students with Disabilities	
SPED 245	Technology in Special Education	
SPED 315	Special Education Issues in Diverse Secondary Classrooms	
SPED 341	Transition Across the Lifespan	
SPED 343	Americans with Disabilities	
SPED 350	Universal Intervention	
SPED 353	Teaching in an Area of High Need	
SPED 360	Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners	
SPED 432	Intensive ELA Interventions for Neuro-Diverse Learners	
SPED 436	Intensive Mathematics Interventions for Neuro-Diverse Learners	
<b>Total Hours</b>		<b>18</b>

- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN SPECIAL EDUCATION (88D)

This program is effective as of Summer 2019.

Revised 10.28.2021

UCC 02.04.20

## College of Engineering and Science DEAN'S OFFICE STAFF

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## DEPARTMENTS

- Biology (p. 263)
- Chemistry (p. 361)
- Computer Science (p. 404)
- Geography, Geology, and the Environment (p. 434)
- Mathematics and Statistics (p. 477)
- Physics and Engineering (p. 497)

## Biology

Chair	Secretary	Location	Department Phone
Dr. Stacy Hrizo	Melissa Barber	300 Vincent Science Center	724-738-2023

Department Web Site URL (<https://www.sru.edu/academics/colleges-and-departments/ces/departments/biology/>)

Department Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/biology-fs.pdf>)

Parks and Conservation Director: Dr. John Lisco

## Faculty

### Simon Beeching

Professor

Biology

Ph.D., Indiana University

B.A., University of Maine

### Martin Buckley

Associate Professor

Biology

Ph.D., Michigan State University

M.S., Saint Louis University

B.A., Saint Louis University

### Jennifer Carben

Assistant Professor

Biology

M.S., Slippery Rock University

B.A., Slippery Rock University

### Nicole Dafoe

Biology

Ph.D., University of Victoria

B.S., Grand Valley State University

### Shawn Davis

Associate Professor

Biology

Ph.D., Colorado State University

M.S., Colorado State University

B.S., University of Delaware

### Dean Denicola

Professor

Biology

Ph.D., Oregon State University

M.S., University of Maine

B.A., University of Vermont

### Anthony DiPippa

Instructor

Biology

### Amber Eade

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Biology

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M.S., Lake Erie College of Osteopathic Medicine

M.A., Chicago School of Professional Psychology

B.S., Millikin University

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Ph.D., University of California

B.S., Allegheny College

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M.S., Southern Illinois University  
B.S., Johnson State College

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### Mark Shotwell

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Ph.D., University of Michigan  
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### Steven Strain

Professor  
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Ph.D., Oregon State University  
B.S., Memphis State University

### Rebecca Thomas

Associate Professor  
Biology  
M.S., Colorado State University  
B.S., Pennsylvania State University

## Programs

### Majors

- Biology, Bachelor of Arts (BA) (p. 285)
- Biology, Bachelor of Arts (BA) - Pre-Master of Education (7-12) (p. 288)
- Biology, Bachelor of Science (BS) - Concentration in Biomedical Sciences (p. 293)
- Biology, Bachelor of Science (BS) - Concentration in Histotechnology (p. 297)
- Biology, Bachelor of Science (BS) - Concentration in Medical Technology (p. 299)
- Biology, Bachelor of Science (BS) - Concentration in Professional (p. 302)
- Biology, Bachelor of Science (BS) - Concentration in Professional - Concentration in Bioinformatics (p. 306)
- Biology, Bachelor of Science (BS) - Concentration in Professional / Antigua Medicine (4+4) (p. 310)
- Biology, Bachelor of Science (BS) - Concentration in Professional / Pre-Chiropractic (Logan) (3+3) (p. 314)
- Biology, Bachelor of Science (BS) - Concentration in Professional / Pre-Chiropractic (Palmer) (3+3) (p. 317)
- Biology, Bachelor of Science (BS) - Concentration in Professional / Pre-Dental (LECOM) (4+4) (p. 319)
- Biology, Bachelor of Science (BS) - Concentration In Professional / Pre-Dental (WVU) (4+4) (p. 323)
- Biology, Bachelor of Science (BS) - Concentration in Professional / Pre-Master of Education (7-12) (p. 327)
- Biology, Bachelor of Science (BS) - Concentration in Professional / Pre-Osteopathy (LECOM) (3+4) (p. 331)
- Biology, Bachelor of Science (BS) - Concentration in Professional / Pre-Osteopathy (LECOM) (4+4) (p. 334)
- Biology, Bachelor of Science (BS) - Concentration in Professional / Pre-Physical Therapy (SRU) (3+3) (p. 338)
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- Biology, Bachelor of Science (BS) - Concentration in Professional / Pre-Physician Assistant (SRU) (3+2) (p. 346)
- Biology, Bachelor of Science (BS) - Concentration in Professional / Pre-Physician Assistant (SRU) (Traditional) (p. 349)
- Biology, Pre-Pharmacy (LECOM) (2+3) (p. 355)
- Park & Resource Management, Bachelor of Science (BS) (p. 358)

## Minors

- Biology, Minor (p. 353)
- Environmental Communication and Heritage Interpretation, Minor (p. 357)
- Marine Science, Minor (p. 358)

## BIOL Courses

### BIOL 100 - Introductory Biology Laboratory

This laboratory activity course is designed to introduce the non-biology major to science as a process. Basic biological concepts and principles are the focal points for the laboratory activities. The scientific process is used throughout the hands on exercises to facilitate the learning experience.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

### BIOL 101 - General Biology

A principles course in biology, designed for non-biology majors, which emphasizes cellular structure and function, Mendelian and molecular genetics, reproduction, and classic and modern concepts of ecology and evolution.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

### BIOL 105 - Environmental Biology

A non-biology majors course which provides an introduction to ecological principles and concepts with an examination of the biological basis of contemporary environmental problems.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

### BIOL 110 - The Human Body: Fundamentals of Structure and Physiology

This one semester lecture course is designed for non-biology majors and provides a basic introduction to the human body and the fundamental anatomy and physiology of each organ system.

Credits: 3

Thematic Thread(s): Conservation, Technology & Imagination, Human Diversity & Well-Being, Transfer Thread Completion Course

### BIOL 113 - Biology I: Foundations of Ecology, Evolution and Diversity with Lab

A laboratory and lecture course that covers the principles of evolution, ecology and organismal diversity to prepare students for subsequent courses required of biology majors. BIOL113 and BIOL114 can be completed in any order.

Credits: 4

Enrollment limited to students with department of Biology.

### BIOL 114 - Biology II: Foundations of Molecules, Genes and Cells with Lab

A laboratory and lecture course that emphasizes the foundational biological principles in molecular biology, cellular biology and genetics to prepare students for subsequent courses required of biology majors. BIOL113 and BIOL114 can be completed in any order.

Credits: 4

Enrollment limited to students with department of Biology.

### BIOL 120 - Plants and Society

Basic structures, functions, and uses of plants. This course, for the non-biology major, will stress many of the economic and practical aspects of plants. It will also offer historical insights concerning the impact plants have had on world exploration, colonization, etc.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Transfer Thread Completion Course

### BIOL 139 - Foundations of Academic Discovery

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

### BIOL 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with department of Biology.

### BIOL 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with department of Biology.

### BIOL 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with department of Biology.



**BIOL 201 - General Botany with Lab**

Basic biochemical, morphological, and physiological aspects of plant biology as they relate to evolution. Includes a lab.

Prerequisites: (BIOL 101<sup>C</sup> and BIOL 100<sup>C</sup>) or BIOL 104<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 4

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Biology.

**BIOL 207 - Land Plants and Their Environment/Lab**

This course for non-biology majors surveys the common plants native to Pennsylvania. Includes a lab.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**BIOL 208 - Introduction to Wildlife Management/Lab**

For non-biology majors, this course covers basic ecological principles with emphasis on the taxonomy and life histories of vertebrate animals. Includes a lab.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**BIOL 210 - Medical Microbiology with Lab**

The study of pathogenic microorganisms to include taxonomy, structure, biological activities, host defense mechanisms, disease transmission, and disease states. Includes a lab.

Prerequisites: BIOL 101<sup>D</sup> or BIOL 102<sup>D</sup> or BIOL 216<sup>D</sup> or BIOL 110<sup>D</sup> or BIOL 104<sup>D</sup> or BIOL 217<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment is limited to students with a major in Biology, Biology (Pre MEd) (7-12), Biology, Biology-Prof (Pre MEd)(7-12), Health Science - Public Health, Hlth Sci-P Hlth-Pre PT-SRU 3+3, Hlth Sci-P Hlth-Pre PA-SRU 3+2, Cytotechnology, Histotechnology, Medical Technology or Professional.

**BIOL 212 - General Zoology with Lab**

The anatomy, physiology, ecology, and economic importance of representative animals with emphasis on the understanding of development and the evolutionary blueprint of the animal kingdom. Includes a lab.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 4

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Biology.

**BIOL 216 - Anatomy and Physiology I with Lab**

The first of two lecture and laboratory courses for non-biology majors which surveys the normal structure and function of the human body. It is recommended that 216 be taken prior to 217. This course includes a lab.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Enrollment is limited to students with a major in Music Therapy, Biology, Biology (Pre MEd) (7-12), Biology, Biology-Prof (Pre MEd)(7-12), Health Science - Public Health, Hlth Sci-P Hlth-Pre PT-SRU 3+3, Therapeutic Recreation Serv, Recreational Therapy, Therapeutic Recreation 3+3 PT, Rec Therapy- Pre PT-SRU 3+3, Rec Therapy-Pre OT-SRU 3+3, Hlth Sci-P Hlth-Pre PA-SRU 3+2, Cytotechnology, Histotechnology, Medical Technology or Professional.

**BIOL 217 - Anatomy and Physiology II with Lab**

The second of two lecture and laboratory courses for non-biology majors which surveys the normal structure and function of the human body. It is recommended that 216 be taken prior to 217. Includes a lab.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Enrollment is limited to students with a major in Music Therapy, Biology, Biology (Pre MEd) (7-12), Biology, Biology-Prof (Pre MEd) (7-12), Therapeutic Recreation Serv, Recreational Therapy, Therapeutic Recreation 3+3 PT, Rec Therapy- Pre PT-SRU 3+3, Rec Therapy-Pre OT-SRU 3+3, Cytotechnology, Histotechnology, Medical Technology or Professional.

**BIOL 250 - Genetics with Lab**

An introductory course that covers transmission genetics, molecular genetics, and population genetics, with an emphasis on problem-solving. Examples in both plants and animals (including humans) are considered. Includes a lab.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 4

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Chemistry or Biology.

**BIOL 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with department of Biology.

**BIOL 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with department of Biology.

**BIOL 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with department of Biology.

**BIOL 300 - Social and Ethical Issues in Genetics**

Advances in genetics have the potential to do much good, but they may also create difficult social and ethical issues that we are unprepared for. This course seeks to provide students of all majors with the necessary framework for arriving at their own conclusions about the proper role of genetic technology, for themselves, their families, and society at large.

Prerequisites: BIOL 101<sup>D</sup> or BIOL 102<sup>D</sup> or BIOL 104<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**BIOL 301 - Forest Ecology**

This course is offered as part of the Pymatuning Laboratory in conjunction with the University of Pittsburgh. For more information, please contact the Biology department, 724-738-2023.

Prerequisites: BIOL 201<sup>C</sup> and (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 302 - Ecology of Amphibians & Reptiles/Lab**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 303 - Behavioral Ecology/Lab**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 305 - Wetlands and Aquatic Plants/Lab**

This course deals with the identification and quantification of phytoplankton and vascular hydrophytes, with emphasis placed on the productivity of aquatic plants and their importance as indicator organisms. Includes a lab.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup> and CHEM 108<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Biology, Biology (Pre MED) (7-12), Environmental Geoscience, Envir Geosci (Pre MED) (7-12), Biology, Biology-Prof (Pre MED)(7-12), Environmental Geoscience, Cytotechnology, Environmental Science, Environmental Chemistry, Geology, Histotechnology, Medical Technology or Professional.

**BIOL 306 - Freshwater Biomonitoring/Lab**

This course covers the identification and quantification of fish, zooplankton, and benthos organisms, with emphasis placed on the productivity of aquatic animals and their importance as indicator organisms. Includes a lab.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup> and CHEM 108<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**BIOL 307 - Vertebrate Ecology/Lab**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 308 - Aquatic Ecosystem Management / Lab**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 310 - Plant Systematics with Lab**

Evolutionary trends in floristic morphology are used to examine family relationships among the major groups of vascular plants. Includes a lab.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup> and BIOL 201<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 311 - Entomology/Lab**

Insects, including their taxonomy, structure, function, ecology, and economic importance.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 313 - Herpetology/Lab**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 314 - Medical Parasitology with Lab**

A lecture and laboratory course which emphasizes the parasites of medical importance.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup> and (BIOL 210<sup>C</sup> or BIOL 212<sup>C</sup>)  
<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 316 - Medical Immunology with Lab**

A lecture and laboratory course which emphasized immunological principles of medical importance.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup> and (BIOL 210<sup>C</sup> or BIOL 250<sup>C</sup>)  
<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 317 - Ecology and Fungi**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms Even

**BIOL 319 - Medical Virology with a Lab**

A lecture and laboratory course which discusses viruses of medical importance. Lecture content will focus on the life cycle, pathology and treatment of clinically relevant viruses. Laboratory content may teach students about topics such as, but not limited to, calculating viral load, detecting lysogens, detecting viruses by ELISA and immunity in lysogens.

Prerequisites: (BIOL 104<sup>C</sup> or (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>)) and (BIOL 210<sup>C</sup> or BIOL 250<sup>C</sup>)  
<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2 or Sophomore 2.

Enrollment limited to students with department of Biology.

**BIOL 320 - Ornithology/Lab**

Anatomy, physiology, taxonomy, ecology, and behavior of birds. Two weekend field trips are required. Includes a lab.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup> and BIOL 212<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 321 - Wildlife Management/Lab**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 322 - Conservation Biology/Lab**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

Thematic Thread(s): Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 323 - Stream Ecology/Lab**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 325 - Biometry with Lab**

An introduction to statistical techniques and experimental design as applied to biological problems. Descriptive methods, tests of significance, linear regression, correlation, analysis of variance and covariance, and non-parametric techniques are included. Use of PC and/or mainframe computer is required. Includes a lab.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Geography - Envir Studies Educ, Biology, Biology (Pre MEd) (7-12), Environmental Geoscience, Envir Geosci (Pre MEd) (7-12), Biology, Biology-Prof (Pre MEd)(7-12), Environmental Geoscience, Biology-Logan Chiropractic 3+3, Environmental Science, Geology or Professional.

**BIOL 326 - Field Methods in Biogeography/Lab**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 327 - Limnology/Lab**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 330 - Microbiology/Lab**

A consideration of the structure, metabolism, growth, and genetics of microorganisms with emphasis placed on the bacteria and viruses. Includes a lab.

Prerequisites: BIOL 250<sup>C</sup> and (CHEM 200<sup>D</sup> or CHEM 201<sup>D</sup>) and ((BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Chemistry or Biology.

**BIOL 331 - Mammology/Lab**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 335 - Cell Biology/Lab**

Lecture and laboratory investigations related to cellular structure and function. Topics include consideration of extracellular matrix, cell surface, internalization, intracellular signaling and routing, cell-cell communication, renewal, and development. Includes a lab.

Prerequisites: BIOL 250<sup>C</sup> and (CHEM 200<sup>D</sup> or CHEM 201<sup>D</sup>) and ((BIOL 100<sup>D</sup> and BIOL 101<sup>D</sup>) or BIOL 104<sup>D</sup>)

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Chemistry or Biology.

**BIOL 340 - Vertebrate Anatomy with Lab**

A comparative study of the adult structure of the organs and systems of representative vertebrates. Includes a lab.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup> and BIOL 212<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 343 - Embryology with Lab**

Developmental processes of vertebrate embryology. A comparative study of gaetogenesis, fertilization, cleavage, gastrulation, organogenesis, and embronic adaptations. Includes a lab.

Prerequisites: ((BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup>) and BIOL 212<sup>C</sup> and BIOL 340<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 350 - Evolution**

Stresses evolution as a process. Evidence of early theories, population genetics and ecology, modern synthetic theory, speciation, phylogeny, and the major features characteristic of organic evolution are included.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup> and BIOL 201<sup>C</sup> and BIOL 212<sup>C</sup> and BIOL 250<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 356 - Field Ecology / Lab**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 357 - Environmental Microbiology with Lab**

The interactions of microorganisms with their environment and with other organisms in nutrient cycles and environmental bioremediation, and the effects of microbial activity on plants and animals. Includes a lab.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup> and CHEM 108<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 4

Term(s) Typically Offered: Offered Fall Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Biology, Biology (Pre MEd) (7-12), Environmental Geoscience, Envir Geosci (Pre MEd) (7-12), Biology, Biology-Prof (Pre MEd)(7-12), Environmental Geoscience, Cytotechnology, Environmental Science, Geology, Histotechnology, Medical Technology or Professional.

**BIOL 360 - Field Botany**

A field course covering the flora of western Pennsylvania. Students will be expected to identify in the field approximately 225 vascular plants.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup> and BIOL 201<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 361 - Flora of Western Pennsylvania**

A field class with a lecture component. The primary focus of the class is to enhance student understanding of the taxonomy and ecology of species that compose our flora in western Pennsylvania. Organisms that will be covered include: flowering plants (woody angiosperms and common wildflowers), conifers, ferns & fern allies, bryophytes, lichens, and some representative fungi and macroalgae in our flora. Terminology associated with general plant/fungal/algal structure as well as life cycles of these aforementioned organisms will be described. Students will be introduced to both terrestrial and aquatic ecosystems and the habitats that select species require.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**BIOL 370 - Molecular Biology with Lab**

A lecture and laboratory study of the structure and function of biological macromolecules and of the functions of living cells at the molecular level. Topics include macromolecular structures, gene expression and regulation, and manipulations of genetic material. Includes a lab.

Prerequisites: ((BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup>) and BIOL 250<sup>C</sup> and (CHEM 200<sup>D</sup> or CHEM 201<sup>D</sup>)  
<sup>C</sup> Requires minimum grade of C.  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Chemistry or Biology.



**BIOL 371 - Vertebrate Field Zoology**

Taxonomy, life histories, and ecological relationships of representative vertebrates are stressed. Several field trips are required.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 373 - Ichthyology/Lab**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 375 - Ecology of Fish / Lab**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup> and BIOL 212<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 400 - Disease Ecology**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

**BIOL 401 - Ecology with Lab**

Emphasis is placed on the structure, composition, and dynamics of ecosystems. Lab work primarily consists of field studies.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup> and CHEM 108<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Summer Terms

Thematic Thread(s): Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment is limited to students with a major in Biology, Biology (Pre MEd) (7-12), Environmental Geoscience, Envir Geosci (Pre MEd) (7-12), Biology, Biology-Prof (Pre MEd)(7-12), Environmental Geoscience, Cytotechnology, Environmental Science, Environmental Chemistry, Geology, Histotechnology, Medical Technology or Professional.

**BIOL 402 - Biogeography/Lab**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**BIOL 405 - Animal Physiological Ecology with Lab**

The adaptations of animals to deal with specialized environmental situations are studied at levels ranging from biochemical to organismal. Includes a lab.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup> and BIOL 212<sup>C</sup>

and CHEM 107<sup>D</sup> and CHEM 108<sup>D</sup>

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 410 - Animal Physiology with Lab**

Basic animal physiological processes, including a synthesis that begins at the molecular level and moves to the more complex cellular and organismal levels. Includes a lab.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup> and BIOL 212<sup>C</sup> and CHEM 201 (may be taken concurrently)<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 411 - Population Biology/Lab**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 412 - Population Biology**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**BIOL 430 - Pathogenic Microbiology with Lab**

This course examines the role of bacteria in disease processes with emphasis on host-pathogen interactions and mechanisms by which pathogenic bacteria cause disease. General topics to be discussed include pathogenesis, epidemiology, and characteristics of the major pathogenic bacteria, which allow them to produce a disease state in the host. Includes a lab.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup> and BIOL 250<sup>C</sup> and BIOL 330<sup>D</sup>

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 450 - Biology Internship**

This course will permit the biology major to obtain credit for on-the-job experience in such areas as hospitals, greenhouses, nurseries, sewage plants, fish, and game commissions, park service, plant breeders, and seed producers, veterinary medicine, etc.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup> and BIOL 201<sup>C</sup> and BIOL 212<sup>C</sup> and BIOL 250<sup>C</sup> and CHEM 107<sup>D</sup> and CHEM 108<sup>D</sup> and CHEM 111<sup>D</sup> and CHEM 112<sup>D</sup> and CHEM 201<sup>D</sup> and CHEM 211<sup>D</sup> and CHEM 202<sup>D</sup> and CHEM 212<sup>D</sup>

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 1-6

Term(s) Typically Offered: Offered Every Term

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 451 - Plant Physiology/Lab**

A lecture-laboratory study of the functional relationships of the plant body including such topics as nutrition, water relations, photosynthesis, photo-periodism, hormones, and growth processes.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup> and BIOL 201<sup>C</sup> and CHEM 201<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 470 - Histology with Lab**

Microscopic structure and arrangement of tissues in multicellular organisms. Prepared microscopic slides of representative animal organs are studied. Includes a lab.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup> and BIOL 212<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 490 - Independent Study**

Independent research under the guidance of a faculty member. Prerequisite: Permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. (repeatable up to 6 credits) Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 492 - Biology Seminar**

For junior and senior biology majors. Each semester a different area of current research interest is chosen for study.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup> and BIOL 201<sup>C</sup> and BIOL 212<sup>C</sup> and BIOL 250<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup> and BIOL 201<sup>C</sup> and BIOL 212<sup>C</sup> and BIOL 250<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

## MARS Courses

**MARS 110 - Introduction to Oceanography**

An introduction to marine sciences with emphasis on physiography of the ocean basins, waves, tides, near-shore processes, the physical and chemical nature of seawater, circulation, characteristics of marine plant and animal communities, history of oceanography, and law of the sea.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MARS 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MARS 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**MARS 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MARS 200 - Art Workshop-Painting of the Coastal Area**

This workshop is to be an intensive involvement with the esthetic qualities of the seashore and its environs. Paintings using various media (watercolor, oils, acrylics) according to personal preference will be created. Slides and other reproductions of relevant paintings by artists of historical importance will be examined and discussed.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MARS 201 - Art Workshop-Pewter and Marine Jewelry**

This workshop will explore pewter and objects found in the near-shore environment as materials for making jewelry and body ornaments. Participants will learn techniques of casting, fabricating, soldering, tinning and bezel setting for the purpose of creating unique pieces.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MARS 204 - Writing about the Sea**

A survey of literature from several genre, both fiction and nonfiction, which focuses on maritime themes and topics.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MARS 211 - Field Methods in Oceanography**

A course to familiarize students with the dynamic marine environment and field work on board small research vessels, to instruct in the use and application of standard oceanographic instruments and sampling devices and to promote and encourage independent research through the initial stages of scientific projects.

Prerequisites: MARS 110<sup>D</sup> or EGEO 131<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MARS 212 - Navigation**

This course covers navigation, i.e. the art and science of safely bringing a boat from one position to another in a body of water. Topics covered are piloting, navigation within sight of land, electronic navigation, radio bearings by radio direction finder, LORAN, OMEGA, radar, celestial navigation, circles of equal altitude, navigational triangle, celestial lines of position, celestial fix, Greenwich Mean Time, Greenwich Hour Angle.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MARS 215 - Marine Wildlife Photography**

This class includes an in-depth study of the science of photography and how this relates to the field work of marine biology. The student will develop skills in micro- and macrophotography and an understanding of the science of optics, filter and camera techniques, and darkroom procedures and techniques. The class will learn various chemical processes for color and black/white photography. Specific articles on marine science photography will be used to develop an understanding both within the marine science laboratory and in the field.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MARS 221 - Marine Invertebrates**

A study of the invertebrate phyla with emphasis on development, reproduction, structure, function and classification of selected marine organisms. Laboratory field experience will be given in collection, preservation and classification of the phyla.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MARS 241 - Marine Biology**

A study of plant and animal life in the marine environment. Emphasis will be on physical and chemical environmental factors affecting the biota in the inter-tidal, open water, and benthic habitats. Common biota characteristic of each habitat will be investigated in terms of their natural history, morphology, and ecological relationships.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MARS 250 - Wetland Ecology**

The ecology and management of wetland wildlife with emphasis on the management of wetlands as ecological systems.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MARS 260 - Marine Ecology**

A study of the ecology of marine organisms, the relationship of plants and animals to physical, chemical and bio-logical factors and their zonation and communities.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MARS 270 - Coastal Vegetation**

In-depth examination of vegetation falling under the marine influence. Identification of same and determination of factors limiting and controlling their distribution.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MARS 280 - Field Biology**

An introduction to basic principles of ecology and natural history of selected plants and animals in terrestrial, freshwater, and marine environments. Course is suitable for non-science majors.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MARS 285 - Recreation Management/Development in the Coastal Zone**

This course focuses on the recreation component of coastal zone management. The nature, extent, location, and value of coastal recreation behavior will be probed and related to the overall coastal management framework.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MARS 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MARS 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**MARS 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MARS 300 - Behavior of Marine Organisms**

Concepts of ethology; discussion and observation of the influences of external and internal factors on the regulation and control of behavior of organisms living in the marine coastal environment.

Prerequisites: BIOL 113<sup>C</sup> and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 310 - The Mammals of Coastal Ecosystems**

Distribution, behavior, physiology, adaptations, and ecological relationships of mammals with special emphasis on the mammals of the Delmarva Peninsula. In addition to the lectures and seminars, the laboratory and field work will deal with the productivity, population dynamics, species diversity, ecoenergetics, and behavior of local mammals.

Prerequisites: BIOL 113<sup>C</sup> and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 320 - Marine Microbiology**

A survey of methods and concepts of marine microbiology. Attention will be given to technical aspects of sample collection, microbial ecology of the marine environment, enrichment culturing, methods of enumeration and identification with emphasis on marine bacteria.

Prerequisite: BIOL 330<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 330 - Tropical Invertebrates**

An introduction to tropical invertebrates. A variety of collection and observation methods will be used to sample near-shore and reef areas. Emphasis will be on systematics and ecology using the communities approach. One week at Wallops will be intensive review of general systematics and ecology of marine invertebrates. The last two weeks in Florida will involve sampling and identifying species and describing ecological communities.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 331 - Chemical Oceanography**

Treatment of a wide range of oceanic chemical phenomena, including salinity and age of the oceans, sources and residence times of chemical constituents in seawater, geochemical cycles of mineral resources and trace elements. Sampling and laboratory analysis techniques.

Prerequisites: MARS 110<sup>D</sup> or EGE0 131<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 342 - Marine Botany**

A study of marine and marine fringe plants of the Middle Atlantic Coast, their taxonomy, ecology, distribution, life histories, physiology, and economic status. Techniques of collecting, preserving, identifying and herbarium cataloging will be stressed. Exercises in plant ecology and marine microbiology will be included.

Prerequisites: BIOL 113<sup>C</sup> and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 343 - Marine Ichthyology**

A study of the fishes. Specimens collected along the eastern seaboard by the students will be used to illustrate the anatomy, physiology and systematics of this major vertebrate group. Field collections will also give students the opportunity to observe the relationships of these animals to their biotic and physical environment.

Prerequisites: BIOL 113<sup>C</sup> and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 344 - Anatomy of Marine Chordates**

A course designed to familiarize the students with the qualitative aspects of the speciation process; to lay ground work for understanding the basic and specialized structure of marine chordates; to trace the most obvious or important trends (and their functional significance) in the evolution of this basic structure in various vertebrate lines. The laboratories will be devoted primarily to dissection of representative marine vertebrates, particularly those collected live on field trips.

Prerequisites: BIOL 113<sup>C</sup> and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 345 - Ornithology**

Introduces the student to avian fauna of the seacoast and at the same time enables comparison with inland species. In addition to the field work providing visual and vocal identification, lecture material will include information on the distribution, behavior, physiology, and anatomy of birds.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 350 - Physiology of Marine Invertebrates**

Mechanisms and regulation of organ function in marine invertebrates with emphasis on homeostasis. Invertebrate examples of fundamental principles and of unique physiological mechanisms.

Prerequisites: BIOL 113<sup>C</sup> and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 362 - Marine Geology**

Structure and sedimentology of the ocean basins and shores; methods of exploration, general feature of the ocean basins, and theory of ocean basin evolution.

Prerequisites: MARS 110<sup>D</sup> or EGE0 131<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**MARS 364 - Physical Oceanography**

A study of the physical properties of the oceans to include: mass and energy budgets; theory of distribution of variables; cause, nature, measurement, analysis and prediction of tides, currents and waves; basic instrumentation in field work.

Prerequisites: MARS 110<sup>D</sup> or EGEO 131<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 394 - Comparative Physiology of Marine Organisms**

This course will provide an introduction to the physiology of marine organisms utilizing a comparative approach. The lecture will introduce the topics of respiration, circulation, metabolism, osmoregulation, thermoregulation, locomotion and sensory systems by drawing comparisons between the mechanisms and strategies utilized by a wide range of marine organisms. Laboratory and field work will focus on the physiological responses of marine plants and animals to common environmental stresses such as salt load, temperature variation, depletion of dissolved oxygen, and tidal flux. This will be accomplished through measurements and observations in the field, as well as through experimental manipulations in a laboratory setting.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisites: BIOL 113<sup>C</sup> and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 420 - Marine Micropaleontology**

Designed for students majoring in either biological or geological sciences, the course will deal with modern, living representatives of micro-organisms important in the fossil record. Particular emphasis will be on the taxonomy, morphology, evolution and ecological affinities of the Foraminifera (Sarcodina), but other groups, including the Radiolaria, Diatoms and Ostracoda, will also be considered. Laboratory and field aspects will include sample collecting, preparation and analysis.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 431 - Ecology of Marine Plankton**

Study of the phytoplankton and zooplankton in marine and brackish environments. Qualitative and quantitative comparisons will be made between the planktonic populations of various types of habitats in relation to primary and secondary productivity.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 432 - Marine Evolutionary**

The study of the ecological mechanisms underlying evolutionary processes. This course is broad in scope and requires that students synthesize both evolutionary and ecological concepts and theory into an understanding of how organisms adapt to their environment. Marine, estuarine, and maritime organisms will be used as model systems and processes, which affect marine populations, will be emphasized.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 441 - Biology of Molluscs**

The Mollusca is the second largest group of animals and perhaps the most diverse in terms of morphological, ecological and behavioral variations. This course offers an evolutionary, functional, and ecologic approach to studying this important group of organisms.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 451 - Coastal Environmental Oceanography**

This course examines the interaction of biological, chemical, physical, geological and ecological ocean processes as applied to coastal environments. Emphasis is placed on environmental management issues of the coastal zone. Topics include water quality analysis, barrier island geology and ecology, estuarine pollution, beach defense and biological implications in areas of coastal upwelling and coastal fronts. Specific cases in coastal pollution will be examined from coastal environments around the U.S., including Kepone in the James River, VA, DDT on the Palos Verde Shelf, CA., Eutrophication on the North Carolina Coast, The Exxon-Valdez Oil spill and *Pfisteria* in the coastal waters of N.C. and VA. Cross listed as MARS551.

Prerequisites: MARS 110<sup>D</sup> or EGEO 131<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 457 - Marine Geophysics**

A study of the basic geophysical theories about the transmission of shock waves, and gravity and magnetic fields to the understanding and exploration of the continental shelves and marine basins. The student is introduced to the use and limitations of the portable seismic refraction seismograph, gravity meter, and magnetometer.

Prerequisites: MARS 110<sup>D</sup> or EGEO 131<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 458 - Exploration Methods in Marine Geology**

A study of geophysical and geologic instruments and techniques used to penetrate the water layer obscuring the ocean bottom topography and geology and the results of some of that effort. Emphasis is on laboratory and field assignments using basic geophysical and geological instruments. The students are introduced to the use, limitations and results of these instruments.

Prerequisite: EGEO 101<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 459 - Coastal Geomorphology**

A study of coastal environments with an emphasis on understanding the inter-relationship among land forms, processes and materials. The student will participate in field studies conducted along high and low wave energy environments.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 464 - Biological Oceanography**

Interdisciplinary study of the interactions between biological communities and the ocean environment as seen by distributions of coastal plankton, fish, and benthic invertebrates. Projects will involve boat trips to sample populations and to quantitatively document environmental variables with state of the art equipment, laboratory and field experiments to determine rate processes, and visits to nearby field and government laboratories. Examples of project topics include transport of plankton at barrier island passes, effect of submarine banks on fish populations, ground truth data for satellite imagery, and other current topics in biological oceanography.

Prerequisites: MARS 110<sup>D</sup> or EGEO 131<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 490 - Independent Study**

Independent research under the guidance of a faculty member.

Prerequisite: Permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. (repeatable up to 6 credits) Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MARS 491 - Coral Reef Ecology**

A study of coral reef structure, formation, types, and the relationships of reef organisms to their environment. Emphasis is given to species diversity, identification, symbioses, and effects of temperature, salinity, light, nutrient concentration, predation, and competition on the abundance and the distribution of coral reef organisms.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 492 - Marine Mammals**

A study of the distribution, population ecology, behavior, physiology and adaptations of marine mammals. Student projects will entail collecting physiological and behavioral data at field sites and at facilities studying marine mammals.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 493 - Behavioral Ecology**

Designed to present animal behavior within an ecological and evolutionary context. Presents mathematical and theoretical framework of behavioral ecology. An in-depth exploration of the ways in which the behavior of animals is influenced by the environment, especially with regard to resource distribution.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 494 - Marine Aquaculture**

This course will include the theory and practice of raising organisms for food and for the aquarium trade. Techniques for raising economically important organisms from the egg stage to marketable size and their food supplies will be studied.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## PCRM Courses

**PCRM 104 - Foundations in Sustainability**

This course will provide a foundation of basic concepts associated with environmental and its associated cultural sustainability. Emphasis will be placed on the interdependence of our natural resources to achieve sustainability in a cultural context. Course development will move from individual environmental ethics and personal actions to civic responsibility and global perceptions.

Credits: 3

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

**PCRM 105 - Leisure-Centered Living**

The constructive use of leisure and education for leisure are essential tools for a person's successful growth and development. Leisure-centered living is designed to help students investigate, evaluate, and plan leisure/play as a basic human need and necessity for well-being.

Credits: 3

**PCRM 110 - Foundations of Parks and Outdoor Recreation**

This course is designed to provide the student with the conceptual foundations of outdoor recreation as it relates to park resources management, environmental education/interpretation, and outdoor leadership. The course examines the history and philosophy of outdoor recreation and where it fits in the broad field of leisure. Students will be introduced to the roles of government and the private sector in parks and outdoor recreation. In addition, an overview of national resources as well as the interaction of humans with our natural resources will be reviewed. Students will also explore career opportunities and identify needed skills of outdoor recreation professionals.

Credits: 3

**PCRM 111 - Introduction to Park and Resource Management**

This course is a sequel to Foundations of Parks and Recreation I and will continue to examine the historical and philosophical background of the leisure movement with regard to recreation organizations and services. Professional preparation in relation to perceived and actual needs concerning risk management, research and evaluation, information technology, ecological considerations and sustainable planning and management practices in the parks and recreation field will also be explored.

Credits: 3

**PCRM 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**PCRM 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

**PCRM 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

**PCRM 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

**PCRM 204 - Environmental Communication**

In this course, students will learn about the theoretical and applied concepts that guide the discipline of environmental communication including rhetoric & discourse, media, public participation, social marketing, collaboration & conflict resolution, risk communication, and popculture. Students will demonstrate understanding and show application of materials for successful environmental communication in a variety of protected areas and conservation settings.

Credits: 3

**PCRM 210 - Resources for Outdoor Programming**

The outdoors was the first classroom and many lessons are still taught in and for the outdoors. This course is designed to provide anyone working in a recreational or park setting with methods and materials to use to achieve a variety of educational and recreational goals. Emphasis will be placed on identifying and using existing instructional materials, in addition to developing personal materials and lessons for outdoor programming.

Credits: 3

**PCRM 211 - Outdoor Leadership**

This course is a study of the principles and practices essential for outdoor leaders with emphasis on the development of KSAs to lead groups into the wild outdoors.

Credits: 3

Thematic Thread(s): Institutions & Human Innovations, Transfer Thread Completion Course

**PCRM 214 - Parks and Recreation Planning**

This course provides a comprehensive introduction to the field of recreation planning. Class sessions will focus on a variety of planning approaches and tools, which are utilized throughout the field of recreation. Students will gain familiarity with these planning tools as they engage in an abbreviated campus-wide study focused on the availability of recreational resources to SRU students.

Prerequisites: PREE 110<sup>D</sup> or PCRM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

**PCRM 251 - Field Experience**

Opportunities for basic practical experience in a variety of park and recreation/environmental education settings. May be repeated up to 3 times.

Credits: 1

**PCRM 271 - Law Enforcement Firearms**

This course provides basic orientation to and qualification with the approved handgun and familiarization with the 12 gauge shotgun including safety and "shoot-no shoot situations.

Credits: 3

**PCRM 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

**PCRM 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

**PCRM 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

**PCRM 304 - Search and Rescue/Wilderness Medicine**

This course will provide basic and intermediate instruction in search and rescue techniques and emergency medical procedures in wilderness settings. Students will be introduced to the various evacuation and stabilization procedures that are commonly implemented in emergency situations.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 315 - Recreation Resource Planning and Analysis**

This course is designed specifically for student in the Park and Resource Management track. It is designed to provide the student with application of the planning process, from site and program analysis into planning recreational facilities. Students will use a variety of planning tools and on-line analysis resources, as well as a variety of professional recreation planning frameworks.

Prerequisites: PREE 214<sup>D</sup> or PCRM 214<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 318 - Administrative Strategies for Resource Managers**

The organization and administration of parks and recreation services, including organizational management, personnel practices and labor relations, financial and business procedures and legal aspects.

Credits: 3

Enrollment limited to students with a semester level of Freshman 1, Freshman 2 or Sophomore 1.

**PCRM 342 - Group Facilitation and Leadership**

This course will cover the concepts related to working with groups as a facilitator. Hands-on approaches to program design, sequencing activities and processing experiences will be examined. Students will facilitate their classmates through a group development experience making use of SRU's low and high challenge courses and the Leadership Reaction Center.

Credits: 3

Thematic Thread(s): Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 347 - Interpretive Methods and Programming**

A study of the principles and methods to interpret natural and cultural history in parks and other outdoor settings.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 348 - Natural History of Ecosystems I**

This course provides basic ecology and natural history information and skills for the purpose of environmental and resource management as well as interpretation and environmental education. Local animal identification, interactions of species with their environment, and species interactions are among the topics covered.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 349 - Natural History of Ecosystems II**

This field-oriented course is designed to integrate basic scientific inquiry and ecological field techniques to develop skills of analysis, synthesis and evaluation of scientific information for the purpose of environmental and resource management. Results of field investigations are applied to relevant ecological problems and management objectives for the purpose of environmental decision making. Topics include local plant and fungi identification, community ecology, ecosystem ecology, and ecological biogeography.

Prerequisites: PREE 260<sup>D</sup> or PREE 348<sup>D</sup> or PCRM 348<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 351 - Parks & Conservation Practicum**

Observation and participation in parks and recreation or environmental education activities. Cross listed as RCTH352.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 371 - Fundamentals of National Park Service Law Enforcement**

This course covers the legal and administrative fundamentals of National Park Service law enforcement including federal law and NPS policies and guidelines.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 372 - Visitor Services Management**

A study of visitor services including information, safety, rescue and law enforcement services.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 374 - Federal Law & Park Policy**

This course is designed to provide students with advanced knowledge of federal law, policies, and procedures. Students will develop an in-depth understanding of Federal policy for various land management agencies with emphasis on National Park Service policy. The course will also cover legal updates in park law enforcement.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 377 - Cultural Resources Management**

This course provides a comprehensive introduction to the management of cultural and historic resources. The course examines the goals, legislation, and methodologies related to cultural resources management, research and programming.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 405 - Social Ecological Systems**

This course uses a social-ecological systems framework in order to advance an interdisciplinary approach to conservation of biological diversity and natural resources. Students will be exposed to contemporary conservation and natural resource management challenges and will learn how those issues can be addressed through an integrated understanding of social and natural systems. Case studies will be presented and discussed in class in order to connect theoretical frameworks to on the ground conservation problems and to consider opposing and controversial viewpoints. Students will develop practical skills in understanding and discussing cross-cultural and interdisciplinary natural resource management issues.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.



**PCRM 415 - Challenges and Trends in Parks and Conservation**

An integrative course for detailed study of current issues in parks and recreation with emphasis on unique and imaginative solutions to the challenges facing the recreation/parks profession. Must be a senior to enroll.

Credits: 3

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

**PCRM 450 - Internship**

A supervised off-campus work experience in an appropriate aspect of parks and recreation or environmental education work. Open only to PCRT majors with advanced standing.

Credits: 1-12

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 471 - NPS Law Enforcement**

This course provides an overview of NPS law enforcement policies and procedures, relevant federal laws, Titles 36 and 50, CFR, and courtroom procedures.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 472 - Park Law Enforcement**

This course provides basic law enforcement skills essential for the park law enforcement ranger.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 475 - Park and Resource Management**

The principles and practices of recreational land and water management. Field trips required.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 477 - Wildlife & Wildlands Field Methods and Management**

Course will cover the application of natural history and ecological concepts as it related to parks, other public lands and environmental education. Emphasis is placed on project development, problem solving and critical thinking skills as they relate to resource management.

Prerequisites: (PREE 348<sup>D</sup> or PCRM 348<sup>D</sup>) and (PREE 349<sup>D</sup> or PCRM 349<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 490 - Independent Study**

A special study opportunity for students to investigate in-depth, approved topics in recreation or environmental studies. Topic and credit established by student and supervising instructor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 491 - Professional Seminar**

This course is designed to assist students in preparing for entry into the environmental education profession. Topics will include career planning, employment opportunities, employment seeking skills, and discussions centering on areas of interest to the student.

Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

**PCRM 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 541 - Design Graphics and Problem Solving**

The application of design and graphic fundamentals to sustainable systems.

Credits: 3

Enrollment limited to students with a semester level of Graduate or Post Baccalaureate.

**PCRM 590 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Enrollment limited to students with a semester level of Graduate.

**PCRM 595 - Recreation Workshops**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Enrollment limited to students with a semester level of Graduate or Post Baccalaureate.

**PCRM 598 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Enrollment limited to students with a semester level of Graduate or Post Baccalaureate.

**PCRM 612 - Open Space Planning**

The fundamentals of open space planning, including feasibility studies, site analysis, resource analysis, and planning consideration.

Credits: 3

Enrollment is limited to Graduate level students.

**PCRM 613 - Analysis of Professional Literature**

A "how to" course in understanding and using statistical analysis for reading and research and techniques for analyzing research publications and writing literature reviews. Offered only as an on-line course.

Credits: 3

Enrollment is limited to Graduate level students.

**PCRM 615 - Issues in Parks and Recreation/Resource Management**

An integrative course for detailed study of current and future challenges facing the parks and recreation professional.

Credits: 3

Enrollment is limited to Graduate level students.

**PCRM 616 - Aquatic Systems**

Using aquatic environments as a thematic focus, this course provides foundational information and teaching techniques related to aquatic systems. The course will cover resource related information, as well as formal and non-formal teaching techniques about amphibians, reptiles, aquatic macro invertebrates and fish. This course includes training in Aquatic Wild.

Credits: 3

Enrollment is limited to Graduate level students.

**PCRM 617 - Terrestrial Systems**

This course focuses on resource management, sustainability and educational teaching techniques as they apply to terrestrial systems. Emphasis will be placed on forests, endangered systems, and the development of associated natural history skills. The course includes training in Project Learning Tree.

Credits: 3

Enrollment is limited to Graduate level students.

**PCRM 618 - Wildlife Education**

This course provides an overview of wildlife and associated teaching techniques. Emphasis will be placed on current issues in conservation, management and identification. Topics will include ornithology and mammalogy. Students will utilize field studies and hands-on, problem solving activities. This course will include training in Project Wild and other associated teaching aids.

Credits: 3

Enrollment is limited to Graduate level students.

**PCRM 621 - Green Schools**

This course provides an overview of specific practices and technologies used in green school facilities and grounds. Course participants will investigate the role that school facilities play in shaping the student's awareness of the natural environment and ways of living sustainably. Through conducting case studies of existing schools, course participants will learn how to evaluate school facilities. Course participants will develop proposals recommending changes to the structure or operation of school facilities, which would create more environmentally-focused educational settings.

Credits: 3

Enrollment is limited to Graduate level students.

**PCRM 631 - Design for Sustainable Landscapes**

Focuses on sustainable and regenerative design/spec projects at residential and homestead scales. Selected assignments require students to research and develop creative solutions that span the boundary between house and garden, and reflect the interrelationships among human and natural systems. The course is founded on permaculture principles, including zoning and stacking functions, but it is expanded to provide practical tools for planning, detailing and implementing small site design projects. Projects may be chosen in urban and rural settings.

Prerequisites: PREE 541<sup>C</sup> or PCRM 541<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Enrollment is limited to Graduate level students.

**PCRM 632 - Group Facilitation and Leadership**

This course will cover the concepts related to working with groups as a facilitator. Hands-on approaches to program design, sequencing activities, and processing experiences will be examined. Students will facilitate their classmates as well as possible REACH Program participants through a group development experience making use of SRU's low and high challenge courses and the Leadership Reaction Course. Students will participate in course/equipment set-up and risk management practices

Credits: 3

Enrollment is limited to Graduate level students.

**PCRM 642 - Sustainable Agriculture Techniques**

This course presents the concepts of agroecology and applies them to on-farm practices. Integrates principles of crop, animal, weed, and insect biology with whole farm management practices, such as use of crop rotation, agroforestry, cover-cropping and conservation techniques.

Credits: 3

Enrollment is limited to Graduate level students.

**PCRM 643 - Sustainable Agricultural Practices in Plant and Animal Husbandry**

This course provides an overview of biology as it applies to sustainable crop management, with a strong emphasis on genetic resource conservation. The course provides numerous opportunities for hands-on practice of sustainable agriculture.

Credits: 3

Enrollment is limited to Graduate level students.

**PCRM 644 - Fertility Considerations in Regenerative Agriculture**

This is a follow-up to Soils as a Resource (645), focusing on sustainable management of the soil fertility base through cropping system development and use of organic amendments.

Credits: 3

Enrollment is limited to Graduate level students.

**PCRM 645 - Soils as a Resource**

This course is designed to provide students with an analysis of the soil resource as a pivotal component of agricultural and natural ecosystems. This synthesis of historic and scientific information will enable students to critically evaluate the sustainability of soil management systems.

Credits: 3

Enrollment is limited to Graduate level students.

**PCRM 654 - Natural and Cultural Resources Law**

Provides students with advanced knowledge of public land laws regarding natural and cultural resources. Topics of student include history and associated laws concerning water, mineral, timber, range, wildlife, recreation, and cultural resources.

Credits: 3

Enrollment is limited to Graduate level students.

**PCRM 655 - Social Science Research Methods in Conservation**

A practical course in using research to study recreation, park, and resource management problems.

Credits: 3

Enrollment limited to students in the MED 9625, MED 9626, MS 966B or MS 966D programs.

Enrollment is limited to Graduate level students.

**PCRM 656 - Environmental Issues**

A course designed to develop skills in the identification, investigation, evaluation, and solution of environmental problems and issues. Students will learn how to use these skills, in formal and non-formal educational situations, in the development of an environmentally literate citizenry.

Credits: 3

Enrollment limited to students in the MED 9625, MED 9626, MS 966B or MS 966D programs.

Enrollment is limited to Graduate level students.

**PCRM 657 - Environmental Grant Writing**

Grant writing is a specialized skill that can supplement and enhance projects and programming. This course is designed to provide basic information and skills in grant writing, with emphasis on the environmental and educational grant potential. Students will learn how to search for appropriate grant sources, the intricacies of grant writing from both the scientific and sociological venues, as well as grant-related nuances.

Prerequisites: PCRM 655 (may be taken concurrently)<sup>C</sup> or PCRM 799<sup>\*C</sup> or PREE 799<sup>C</sup> (may be taken concurrently).

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Enrollment limited to students in the MED 9625, MED 9626, MS 966B or MS 966D programs.

Enrollment is limited to Graduate level students.

**PCRM 658 - Environmental Education**

A study of the history, philosophy, and theory of environmental education; problems and trends in environmental education; and relationships of environmental education to the total school program.

Prerequisites: PCRM 656 (may be taken concurrently)<sup>C</sup> or PCRM 681<sup>\*C</sup> or PREE 681<sup>C</sup> (may be taken concurrently).

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Enrollment limited to students in the MED 9625, MED 9626, MS 966B or MS 966D programs.

Enrollment is limited to Graduate level students.

**PCRM 661 - Design and Resource Development for Energy Conservation**

This course provides an introduction to the concepts and practices of environmentally conscious design. With an emphasis on understanding the natural and cultural context, the course will address the environmental issues related to the development of a small-scale design project.

Credits: 3

Enrollment is limited to Graduate level students.

**PCRM 662 - Healthy Building Systems and Materials**

This course provides an introduction to the theories and practices related to the design of healthy buildings. The course examines the impacts of the built environment on both human health and environmental health, and the role of the designer in addressing these issues.

Credits: 3

Enrollment is limited to Graduate level students.

**PCRM 663 - Alternative Energy and Engineering for Sustainable Systems**

The course will explore environmental technology and energy efficiency as they relate to buildings. Topics will include passive and active techniques for thermal comfort, day-lighting and alternative energy resources.

Credits: 3

Enrollment is limited to Graduate level students.

**PCRM 673 - Ecosystem Ecology**

This course examines the principles and practices of ecosystem management. An examination of the ecological concepts and processes that underlie ecosystem integrity is followed by an analysis of the role of humans in shaping and managing ecosystems, including institutional and socioeconomic considerations.

Credits: 3

Enrollment is limited to Graduate level students.

**PCRM 675 - Recreation Resources Management**

The principles and practices of recreational land and water management.

Credits: 3

Enrollment is limited to Graduate level students.

**PCRM 676 - Site and Building Feasibility Studies**

This course is designed to develop a comprehensive feasibility study for selected land-based sustainable enterprises. The course will include an on-site inventory and analysis, market evaluation, preliminary planning and cost-return analysis. Three project tracks recreation resource management, community development and sustainable agriculture.

Credits: 3

Enrollment is limited to Graduate level students.

**PCRM 677 - Cultural Resource Management**

The course presents information on current cultural resource preservation efforts and protection strategies for wildland recreation areas. The course covers: current trends and strategies for identifying cultural resource looting and vandalism; protection strategies for managing cultural and historic resources; and methods for developing a proactive cultural and historic resources protection and management program.

Credits: 3

Enrollment is limited to Graduate level students.

**PCRM 678 - Restoration Ecology**

Restoration ecology is an emerging discipline that addresses ecological healing, and this course examines the principles and practices underlying this growing field. Exploration of conceptual issues is followed by a review of key ecological concepts pertinent to successful restoration of biodiversity and other ecological features. Practical issues for implementation of a restoration project are also thoroughly addressed. A prior understanding of ecological principles is required.

Credits: 3

**PCRM 683 - Parks and Recreation/Environmental Education Administration**

A study of education administration and curricular development for programs; duties and responsibilities of the coordinator or director; and operation and administration of the areas and facilities.

Credits: 3

Enrollment is limited to Graduate level students.

**PCRM 686 - Management Strategy in Parks and Recreation**

A study of administrative and managerial strategy focused on the needs of a parks and recreation professional. Offered only as an on-line course.

Credits: 3

Enrollment is limited to Graduate level students.

**PCRM 688 - Interpretive Media**

A study of various media useful in an interpretive situation, interpretive planning and analysis, and interpretive programming for park and recreation professionals.

Credits: 3

Enrollment is limited to Graduate level students.

**PCRM 689 - Applied Ecology**

This course is an integration of ecology, resource management, and environmental education to promote an understanding of the application of ecological principles as they relate to sustainability. Emphasis is placed on ecological principles that relate to social value orientations and directly apply to resource management practices.

Credits: 3

Enrollment is limited to Graduate level students.

**PCRM 690 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

**PCRM 695 - Recreation Workshops**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Enrollment is limited to Graduate level students.

**PCRM 698 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

**PCRM 700 - Independent Study**

A special study opportunity for students to investigate, in depth, approved topics in recreation, environmental education, or sustainable systems. Topics and credit are established by student and supervising instructor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Enrollment is limited to Graduate level students.

**PCRM 750 - Parks and Recreation/Environmental Education Internship**

Individually designed experiential learning intended to provide the student with an opportunity for observation and participation in an array of parks, recreation, and/or environmental education activities in an approved setting.

Credits: 3-6

Enrollment is limited to Graduate level students.

**PCRM 790 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Enrollment limited to students with a semester level of Graduate.

**PCRM 795 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Enrollment is limited to Graduate level students.

**PCRM 798 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Enrollment is limited to Graduate level students.

**PCRM 800 - Thesis**

Students pursuing a thesis program should contact their academic advisor concerning research after completing about one-half of their degree coursework. The advisor will assist the student with the necessary steps (such as preliminary selection of a topic and arranging for the appointment of a committee) to proceed.

Credits: 6

Enrollment is limited to Graduate level students.

**PREE Courses****PREE 411 - Tourism Planning and Operations**

This course studies the different components of travel, as well as the planning and operation of group/package tours and tourist attractions.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PREE 414 - Concepts and Trends in Travel and Tourism**

The course will focus on current concepts and trends of the travel and tourism industries both domestically and internationally.

Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**Biology, Bachelor of Arts (BA)****Program Learning Outcomes**

- **Competence in Laboratory and Research Skills:** To conduct, assess, and communicate research investigations using established scientific practices.
- **Core Concepts for Biological Literacy:**
  - Knowledge/Content:
    - Evolution
    - Structure and function across all levels of biological organization
    - Diversity and interactions of life
    - Information flow, exchange and storage in biological systems
  - Critical Thinking/Problem Solving:
    - Connect information from cognate science courses and liberal arts courses to biological concepts
    - Apply scientific information to current and future societal problems
- **Participation in Diverse, Enriching Scientific Activities:** Apply technical and professional skills in hands-on laboratory, clinical or field experiences.
- **Professional Attitude:** Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.

**Related Links**

Biology, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/biology/>)

Biology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/biology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

**Curriculum Guide****GPA Requirement**

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

Core GPA: 2.0 or higher

**Summary\***

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Modern Language Requirement	0-9
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	39
	Natural Science and Math College-Wide Requirements	12
	Electives	36

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

**Rock Studies 2 Requirements**

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 125	Precalculus	4
or MATH 225	Calculus I	
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
<i>Physical Sciences Inquiry</i>		
PHYS 201	Elements of Physics I with Lab	4
or PHYS 216	University Physics 1 with Lab	
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>45</b>



- 1 Course offered in multiple subjects; cannot take course in first major subject.
- 2 One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
Complete 0-9 credits		0-9
Total Hours		0-9

Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
Total Hours		0-3

Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
Total Hours		0-3

DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

Major/Concentration Requirements

- 20 major credits must be taken at SRU or PASSHE
- 20 major credits must be taken at the 300 level or above
- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- A student must repeat any 200-level course that brings the Biology average below a 2.000.
- Students should complete all 200-level Biology requirements by the end of their sophomore year.

- Student must earn a "C" or better in both Biology I with Lab (BIOL 113) and Biology II with Lab (BIOL 114) before proceeding to their next biology course.
- Students must a "C" or better in both Genetics with Lab (BIOL 250) and Biometry with Lab (BIOL 325) prior to graduating.

Code	Title	Hours
Biology Core Requirements		
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 250	Genetics with Lab <sup>1,4</sup>	4
BIOL 325	Biometry with Lab	3
Subtotal		15
Required Upper-Level Biology		
BIOL 492	Biology Seminar <sup>1</sup>	1
Subtotal		1
Upper Level Biology Electives		
Select nine credits of the following:		9
BIOL 330	Microbiology/Lab <sup>1</sup>	
BIOL 340	Vertebrate Anatomy with Lab <sup>1</sup>	
or BIOL 465		
BIOL 370	Molecular Biology with Lab <sup>1</sup>	
BIOL 401	Ecology with Lab <sup>1</sup>	
BIOL 410	Animal Physiology with Lab <sup>1</sup>	
or BIOL 451		
Plant Physiology/Lab		
Subtotal		9
Additional Upper-Level Biology Electives		
Select six credits from courses not chosen above, or any 300/400 level course listed below. Additional electives may be selected from the Marine Science offerings listed below. PLE courses are only offered during the summer months through our affiliation with Pymatuning Laboratory of Ecology. <sup>2</sup>		6
Upper-Level Electives (p. 287)		
Subtotal		6
Related Sciences – Chemistry		
CHEM 108	General Chemistry II <sup>2</sup>	3
CHEM 112	General Chemistry II Lab <sup>2</sup>	1
CHEM 201	Organic Chemistry I <sup>2</sup>	3
CHEM 211	Organic Chemistry Laboratory I <sup>2</sup>	1
Subtotal		8
Required Major Field Test before Graduation		
Field Test		
Total Hours		39

- 1 Course counts for 50% of Major and Major GPA
- 2 Course counts for 50% of Major requirements but not for Major GPA
- 3 Course counts in Core GPA
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
MATH 125	Precalculus	4
or MATH 225	Calculus I	
PHYS 201	Elements of Physics I with Lab	4
or PHYS 216	University Physics 1 with Lab	

## Electives

Code	Title	Hours
Recommended by the Biology Department		
CHEM 202	Organic Chemistry II	3
CHEM 212	Organic Chemistry Laboratory II	1

## Upper-Level Biology Electives

Code	Title	Hours
BIOL 301	Forest Ecology <sup>1</sup>	3
BIOL 302	Ecology of Amphibians & Reptiles/Lab <sup>1</sup>	3
BIOL 303	Behavioral Ecology/Lab <sup>1</sup>	3
BIOL 305	Wetlands and Aquatic Plants/Lab <sup>1</sup>	3
BIOL 306	Freshwater Biomonitoring/Lab <sup>1</sup>	3
BIOL 307	Vertebrate Ecology/Lab <sup>1</sup>	3
BIOL 308	Aquatic Ecosystem Management / Lab <sup>1</sup>	3
BIOL 310	Plant Systematics with Lab <sup>1</sup>	3
BIOL 311	Entomology/Lab <sup>1</sup>	3
BIOL 313	Herpetology/Lab <sup>1</sup>	3
BIOL 314	Medical Parasitology with Lab <sup>1</sup>	1
BIOL 315	<sup>1</sup>	1
BIOL 316	Medical Immunology with Lab <sup>1</sup>	1
BIOL 317	Ecology and Fungi <sup>1</sup>	3
BIOL 319	Medical Virology with a Lab <sup>1</sup>	1
BIOL 320	Ornithology/Lab <sup>1</sup>	3
BIOL 321	Wildlife Management/Lab <sup>1</sup>	3
BIOL 322	Conservation Biology/Lab <sup>1</sup>	3
BIOL 323	Stream Ecology/Lab <sup>1</sup>	3
BIOL 325	Biometry with Lab <sup>1</sup>	3
BIOL 326	Field Methods in Biogeography/Lab <sup>1</sup>	3
BIOL 327	Limnology/Lab <sup>1</sup>	3
BIOL 330	Microbiology/Lab <sup>1</sup>	3
BIOL 331	Mammology/Lab <sup>1</sup>	3
BIOL 343	Embryology with Lab <sup>1</sup>	3
BIOL 345	<sup>1</sup>	2
BIOL 350	Evolution <sup>1</sup>	3
BIOL 356	Field Ecology / Lab <sup>1</sup>	3
BIOL 357	Environmental Microbiology with Lab <sup>1</sup>	4
BIOL 360	Field Botany <sup>1</sup>	3
BIOL 361	Flora of Western Pennsylvania <sup>1</sup>	3
BIOL 370	Molecular Biology with Lab <sup>1</sup>	3
BIOL 371	Vertebrate Field Zoology <sup>1</sup>	3
BIOL 373	Ichthyology/Lab <sup>1</sup>	3
BIOL 375	Ecology of Fish / Lab <sup>1</sup>	3

BIOL 400	Disease Ecology <sup>1</sup>	3
BIOL 401	Ecology with Lab <sup>1</sup>	3
BIOL 402	Biogeography/Lab <sup>1</sup>	3
BIOL 405	Animal Physiological Ecology with Lab <sup>1</sup>	4
BIOL 410	Animal Physiology with Lab <sup>1</sup>	3
BIOL 412	Population Biology <sup>1</sup>	3
BIOL 430	Pathogenic Microbiology with Lab <sup>1</sup>	3
BIOL 450	Biology Internship <sup>1</sup>	3
BIOL 451	Plant Physiology/Lab <sup>1</sup>	3
BIOL 465	<sup>1</sup>	3
BIOL 470	Histology with Lab <sup>1</sup>	3
BIOL 498	Selected Topics <sup>1</sup>	3
MARS 221	Marine Invertebrates <sup>1</sup>	3
MARS 241	Marine Biology <sup>1</sup>	3
MARS 250	Wetland Ecology <sup>1</sup>	3
MARS 260	Marine Ecology <sup>1</sup>	3
MARS 270	Coastal Vegetation <sup>1</sup>	3
MARS 298	Selected Topics	3
MARS 300	Behavior of Marine Organisms <sup>1</sup>	3
MARS 310	The Mammals of Coastal Ecosystems <sup>1</sup>	3
MARS 320	Marine Microbiology <sup>1</sup>	3
MARS 330	Tropical Invertebrates <sup>1</sup>	3
MARS 342	Marine Botany <sup>1</sup>	3
MARS 343	Marine Ichthyology <sup>1</sup>	3
MARS 344	Anatomy of Marine Chordates <sup>1</sup>	3
MARS 345	Ornithology <sup>1</sup>	3
MARS 350	Physiology of Marine Invertebrates <sup>1</sup>	3
MARS 398	Selected Topics <sup>1</sup>	3
MARS 420	Marine Micropaleontology <sup>1</sup>	3
MARS 431	Ecology of Marine Plankton <sup>1</sup>	3
MARS 458	Exploration Methods in Marine Geology <sup>1</sup>	3
MARS 490	Independent Study <sup>1</sup>	3
MARS 491	Coral Reef Ecology <sup>1</sup>	3
MARS 492	Marine Mammals <sup>1</sup>	3
MARS 498	Selected Topics <sup>1</sup>	3
MARS 500	Problems in Marine Science <sup>1</sup>	3

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Student-faculty research
2. Internships
3. Volunteering
4. Job Shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum

categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

BIOLOGY - BA (6 08)

This program is effective as of Summer 2022

Revised 03.31.2022

UCC 02.01.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ESAP 101	FIRST Seminar *	1
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
Language 101		3
<b>Hours</b>		<b>14</b>
<b>Second Year</b>		
<b>Fall</b>		
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
BIOL 250	Genetics with Lab	4
CHEM 201	Organic Chemistry I	3
CHEM 211	Organic Chemistry Laboratory I	1
Language 102		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
Language 103		3
BIOL 325	Biometry with Lab	3
Creative & Aesthetic Inquiry (p. 29)		3
MATH 125	Precalculus	4
or MATH 225	or Calculus I	
<b>Hours</b>		<b>13</b>
<b>Third Year</b>		
<b>Fall</b>		
Humanities Inquiry (p. 29)		3

Social Science Inquiry (p. 29)		3
BIOL 300+	Upper Level BIOL Elective	3
Free Elective		3
PHYS 201	Elements of Physics I with Lab	4
or PHYS 216	or University Physics 1 with Lab	
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
BIOL 300+	Upper Level BIOL Elective	3
Free Elective		3
Free Elective		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
Thematic Thread Requirement (p. 29)		3
BIOL 300+	Upper Level BIOL Elective	3
BIOL 300+	Upper Level BIOL Elective	3
Free Elective		3
Free Elective		3
Free Elective		2
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
Thematic Thread Requirement (p. 29)		3
BIOL 300+	Upper Level BIOL Elective	3
Free Elective		3
Free Elective		3
Free Elective		3
BIOL 492	Biology Seminar	1
<b>Hours</b>		<b>16</b>
<b>Total Hours**</b>		<b>120</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6 08

Revised date: 04.21.22

## Biology, Bachelor of Arts (BA) - Pre-Master of Education (7-12)

Students seeking state certification in secondary education must also complete requirements for a Master of Education degree, a one-year program at SRU. All of our programs are designed to steadily develop the

quantitative, deductive and inductive reasoning skills that biologists must have.

All candidates completing this program and student teaching are eligible to receive Pennsylvania certification after achieving a passing or qualifying score on Pennsylvania Department of Education required exam(s). If you are interested in teaching in another state, please contact the Department of Education in that state.

## Requirements for the Certification

Teacher certification is earned through the master of education degree at Slippery Rock University. Students seeking secondary school teaching certification in biology must earn a bachelor of arts or a bachelor of science degree in biology and contact the Department of Secondary Education/Foundations of Education concerning its graduate program in education. Information about this program, including prerequisites for admission, may be obtained from the Secondary Education/Foundations of Education office in 114 McKay Education Building.

## Program Learning Outcomes

- **Competence in Laboratory and Research Skills:** To conduct, assess, and communicate research investigations using established scientific practices.
- **Core Concepts for Biological Literacy:**
  - Knowledge/Content:
    - Evolution
    - Structure and function across all levels of biological organization
    - Diversity and interactions of life
    - Information flow, exchange and storage in biological systems
  - Critical Thinking/Problem Solving:
    - Connect information from cognate science courses and liberal arts courses to biological concepts
    - Apply scientific information to current and future societal problems
- **Participation in Diverse, Enriching Scientific Activities:** Apply technical and professional skills in hands-on laboratory, clinical or field experiences.
- **Professional Attitude:** Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.

## Related Links

Biology - Pre-Masters of Education, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/biology-pre-masters-of-education/>)

Biology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/biology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

Core GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Modern Language Requirement	0-9
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	39
	Natural Science and Math College-Wide Requirements	12
	Electives	35

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 125	Precalculus	4
or MATH 225	Calculus I	
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
<i>Physical Sciences Inquiry</i>		
PHYS 201	Elements of Physics I with Lab	4
or PHYS 211	General Physics I with Lab	
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>45</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
Complete 0-9 credits		0-9
Total Hours		0-9

Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
Total Hours		0-3

Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
Total Hours		0-3

DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

Major/Concentration Requirements

- 20 major credits must be taken at SRU or PASSHE
- 20 major credits must be taken at the 300 level or above
- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Before progressing to a 200-level course, students must achieve a 2.000 average in Principles of Biology - BIOL 104.
- Students may register in 200-level courses in any order, but must maintain a Biology average of 2.000 or better and must complete the 200 core sequence before progressing to 300 and 400-level courses in the major.

- A student must repeat any 200-level course that brings the Biology average below a 2.000.
- Students should complete all 200-level Biology requirements by the end of their sophomore year.
- If you have questions about Financial Aid, visit their website (<https://www.sru.edu/admissions/financial-aid/>).
- To view the SRU policy on senior undergraduate students earning graduate credit, click here (<https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/>).

Code	Title	Hours
Biology Core Requirements		
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 250	Genetics with Lab <sup>1,3</sup>	4
BIOL 325	Biometry with Lab	3
Subtotal		15
Required Upper-Level Biology		
BIOL 492	Biology Seminar <sup>1</sup>	1
Subtotal		1
Upper Level Biology Electives		
Select nine credits of the following:		9
BIOL 330	Microbiology/Lab <sup>1</sup>	
BIOL 340	Vertebrate Anatomy with Lab <sup>1</sup>	
or BIOL 465		
BIOL 370	Molecular Biology with Lab <sup>1</sup>	
BIOL 401	Ecology with Lab <sup>1</sup>	
BIOL 410	Animal Physiology with Lab <sup>1</sup>	
or BIOL 451		
Plant Physiology/Lab		
Subtotal		9
Additional Upper-Level Biology Electives		
Select 6 credits from courses not chosen above, or any 300/400 level course listed below. Additional electives may be selected from the Marine Science offerings listed below. PLE courses are only offered during the summer months through our affiliation with Pymatuning Laboratory of Ecology.		6
Upper-Level Biology Electives (p. 291)		
Subtotal		6
Related Sciences – Chemistry		
CHEM 108	General Chemistry II <sup>2</sup>	3
CHEM 112	General Chemistry II Lab <sup>2</sup>	1
CHEM 201	Organic Chemistry I <sup>2</sup>	3
CHEM 211	Organic Chemistry Laboratory I <sup>2</sup>	1
Subtotal		8
Required Major Field Test before Graduation		
Field Test		
Total Hours		39

<sup>1</sup> Course counts for 50% of Major and Major GPA  
<sup>2</sup> Course counts for 50% of Major requirements but not for Major GPA  
<sup>3</sup> Course counts in Core GPA



\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Recommended Courses for Biology Pre-Masters in Education Courses

Listed below are the recommended courses for Biology Pre-Masters of Education majors. You will need to take these courses prior to obtaining your M. Ed.

Code	Title	Hours
SEFE 338	Standards-Based Instruction & Assessment in the Inclusionary Classroom	3
SPED 121	Overview of Special Education	3
One EGEO with Lab		3
Two Math courses (one must be Calculus)		6
Must take the following as part of your upper class Biology Electives:		
BIOL 370	Molecular Biology with Lab	
BIOL 401	Ecology with Lab	
BIOL 410	Animal Physiology with Lab	

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
MATH 125	Precalculus	4
or MATH 225	Calculus I	
PHYS 201	Elements of Physics I with Lab	4
or PHYS 211	General Physics I with Lab	
<b>Total Hours</b>		<b>12</b>

## Electives

Code	Title	Hours
Recommended by the Biology Department		
CHEM 202	Organic Chemistry II	3
CHEM 212	Organic Chemistry Laboratory II	1

## Additional Upper-Level Biology Electives

Code	Title	Hours
BIOL 301	Forest Ecology <sup>1</sup>	3
BIOL 302	Ecology of Amphibians & Reptiles/Lab <sup>1</sup>	3
BIOL 303	Behavioral Ecology/Lab <sup>1</sup>	3
BIOL 305	Wetlands and Aquatic Plants/Lab <sup>1</sup>	3
BIOL 306	Freshwater Biomonitoring/Lab <sup>1</sup>	3
BIOL 307	Vertebrate Ecology/Lab <sup>1</sup>	3
BIOL 308	Aquatic Ecosystem Management / Lab <sup>1</sup>	3
BIOL 310	Plant Systematics with Lab <sup>1</sup>	3
BIOL 311	Entomology/Lab <sup>1</sup>	3
BIOL 313	Herpetology/Lab <sup>1</sup>	3
BIOL 314	Medical Parasitology with Lab <sup>1</sup>	1
BIOL 315	<sup>1</sup>	1
BIOL 316	Medical Immunology with Lab <sup>1</sup>	1
BIOL 317	Ecology and Fungi <sup>1</sup>	3

BIOL 319	Medical Virology with a Lab <sup>1</sup>	1
BIOL 320	Ornithology/Lab <sup>1</sup>	3
BIOL 321	Wildlife Management/Lab <sup>1</sup>	3
BIOL 322	Conservation Biology/Lab <sup>1</sup>	3
BIOL 323	Stream Ecology/Lab <sup>1</sup>	3
BIOL 325	Biometry with Lab <sup>1</sup>	3
BIOL 326	Field Methods in Biogeography/Lab <sup>1</sup>	3
BIOL 327	Limnology/Lab <sup>1</sup>	3
BIOL 330	Microbiology/Lab <sup>1</sup>	3
BIOL 331	Mammology/Lab <sup>1</sup>	3
BIOL 343	Embryology with Lab <sup>1</sup>	3
BIOL 345	<sup>1</sup>	2
BIOL 350	Evolution <sup>1</sup>	3
BIOL 356	Field Ecology / Lab <sup>1</sup>	3
BIOL 357	Environmental Microbiology with Lab <sup>1</sup>	4
BIOL 360	Field Botany <sup>1</sup>	3
BIOL 361	Flora of Western Pennsylvania <sup>1</sup>	3
BIOL 370	Molecular Biology with Lab <sup>1</sup>	3
BIOL 371	Vertebrate Field Zoology <sup>1</sup>	3
BIOL 373	Ichthyology/Lab <sup>1</sup>	3
BIOL 375	Ecology of Fish / Lab <sup>1</sup>	3
BIOL 400	Disease Ecology <sup>1</sup>	3
BIOL 401	Ecology with Lab <sup>1</sup>	3
BIOL 402	Biogeography/Lab <sup>1</sup>	3
BIOL 405	Animal Physiological Ecology with Lab <sup>1</sup>	4
BIOL 410	Animal Physiology with Lab <sup>1</sup>	3
BIOL 412	Population Biology <sup>1</sup>	3
BIOL 430	Pathogenic Microbiology with Lab <sup>1</sup>	3
BIOL 450	Biology Internship <sup>1</sup>	3
BIOL 451	Plant Physiology/Lab <sup>1</sup>	3
BIOL 465	<sup>1</sup>	3
BIOL 470	Histology with Lab <sup>1</sup>	3
BIOL 498	Selected Topics <sup>1</sup>	3
MARS 221	Marine Invertebrates <sup>1</sup>	3
MARS 241	Marine Biology <sup>1</sup>	3
MARS 250	Wetland Ecology <sup>1</sup>	3
MARS 260	Marine Ecology <sup>1</sup>	3
MARS 270	Coastal Vegetation <sup>1</sup>	3
MARS 298	Selected Topics <sup>1</sup>	3
MARS 300	Behavior of Marine Organisms <sup>1</sup>	3
MARS 310	The Mammals of Coastal Ecosystems <sup>1</sup>	3
MARS 320	Marine Microbiology <sup>1</sup>	3
MARS 330	Tropical Invertebrates <sup>1</sup>	3
MARS 342	Marine Botany <sup>1</sup>	3
MARS 343	Marine Ichthyology <sup>1</sup>	3
MARS 344	Anatomy of Marine Chordates <sup>1</sup>	3
MARS 345	Ornithology <sup>1</sup>	3
MARS 350	Physiology of Marine Invertebrates <sup>1</sup>	3
MARS 398	Selected Topics <sup>1</sup>	3
MARS 420	Marine Micropaleontology <sup>1</sup>	3
MARS 431	Ecology of Marine Plankton <sup>1</sup>	3
MARS 458	Exploration Methods in Marine Geology <sup>1</sup>	3

MARS 490	Independent Study <sup>1</sup>	3
MARS 491	Coral Reef Ecology <sup>1</sup>	3
MARS 492	Marine Mammals <sup>1</sup>	3
MARS 498	Selected Topics <sup>1</sup>	3
MARS 500	Problems in Marine Science <sup>1</sup>	3

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

## Co-Curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Student-faculty research
2. Internships
3. Volunteering
4. Job Shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

BIOLOGY - BA (6 08)

w/ optional Pre Masters in Education (7-12) (PX)

This program is effective as of Summer 2022

Revised 07.08.2022

UCC 02.01.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ESAP 101	FYRST Seminar *	1
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4

Language 101		3
<b>Hours</b>		<b>14</b>
<b>Second Year</b>		
<b>Fall</b>		
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
BIOL 250	Genetics with Lab	4
CHEM 201	Organic Chemistry I	3
CHEM 211	Organic Chemistry Laboratory I	1
Language 102		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
Language 103		3
BIOL 325	Biometry with Lab	3
Creative & Aesthetic Inquiry (p. 29)		3
MATH 125 or MATH 225	Precalculus or Calculus I	4
<b>Hours</b>		<b>13</b>
<b>Third Year</b>		
<b>Fall</b>		
Humanities Inquiry (p. 29)		3
Social Science Inquiry (p. 29)		3
BIOL 370	Molecular Biology with Lab <sup>3</sup>	3
SPED 121	Overview of Special Education	3
PHYS 201 or PHYS 211	Elements of Physics I with Lab or General Physics I with Lab	4
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
EGEO/Lab (Recommended Elective)		3
BIOL 300+	Upper Level BIOL Elective	3
Free Elective		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
Thematic Thread Requirement (p. 29)		3
BIOL 401	Ecology with Lab	3
BIOL 410	Animal Physiology with Lab <sup>3</sup>	3
Free Elective		3
Free Elective		2
2nd Math Course		3
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
SEFE 338	Standards-Based Instruction & Assessment in the Inclusionary Classroom	3
Thematic Thread Requirement (p. 29)		3
BIOL 300+	Upper Level BIOL Elective	3
Free Elective		3

Free Elective	3
BIOL 492 Biology Seminar	1
<b>Hours</b>	<b>16</b>
<b>Total Hours**</b>	<b>120</b>

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.
- <sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.
- <sup>3</sup> Recommended BIOL 300+ Upper Level Elective
- \* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6 08

Concentration Code: PX

Revised date: 04.21.22

## Biology, Bachelor of Science (BS) - Concentration in Biomedical Sciences

### Program Learning Outcomes

- **Competence in Laboratory and Research Skills:** To conduct, assess, and communicate research investigations using established scientific practices.
- **Core Concepts for Biological Literacy:**
  - Knowledge/Content:
    - Evolution
    - Structure and function across all levels of biological organization
    - Diversity and interactions of life
    - Information flow, exchange and storage in biological systems
  - Critical Thinking/Problem Solving:
    - Connect information from cognate science courses and liberal arts courses to biological concepts
    - Apply scientific information to current and future societal problems
- **Participation in Diverse, Enriching Scientific Activities:** Apply technical and professional skills in hands-on laboratory, clinical or field experiences.
- **Professional Attitude:** Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.

### Related Links

Biology - Biomedical Sciences, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/biology-biomedical-sciences/>)

Biology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/biology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

Core GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	59
	Natural Science and Math College-Wide Requirements	12
	Electives	16

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 125	Precalculus	4
or MATH 225	Calculus I	
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16

### Integrated Inquiry

<b>Creative and Aesthetic Inquiry</b>		
Select 3 Credits (p. 29)		3
<b>Humanities Inquiry</b>		
Select 3 Credits (p. 29)		3
<b>Social Science Inquiry</b>		
Select 3 Credits (p. 29)		3
<b>Natural Sciences Inquiry</b>		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
<b>Physical Sciences Inquiry</b>		
PHYS 201	Elements of Physics I with Lab	4
or PHYS 216	University Physics 1 with Lab	
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>45</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above
- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Students must earn a "C" or better in both Biology I with Lab (BIOL 113) and Biology II with Lab (BIOL 114) before proceeding to their next biology course.
- Students must earn a "C" or better in both Genetics with Lab (BIOL 250) and Biometry with Lab (BIOL 325) prior to graduating.

Code	Title	Hours
<b>Biology Core Requirements</b>		
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 250	Genetics with Lab <sup>1,3</sup>	4

BIOL 325	Biometry with Lab <sup>1</sup>	3
Subtotal		15

### Required Upper-Level Biology

BIOL 492	Biology Seminar <sup>1</sup>	1
Subtotal		1

### Upper-Level Biology Electives

Select 21 credits from the following:		21
BIOL 314	Medical Parasitology with Lab <sup>1</sup>	
BIOL 315	<sup>1</sup>	
BIOL 316	Medical Immunology with Lab <sup>1</sup>	
BIOL 319	Medical Virology with a Lab <sup>1</sup>	
BIOL 330	Microbiology/Lab <sup>1</sup>	
BIOL 335	Cell Biology/Lab <sup>1</sup>	
BIOL 340	Vertebrate Anatomy with Lab <sup>1</sup>	
BIOL 343	Embryology with Lab <sup>1</sup>	
BIOL 370	Molecular Biology with Lab <sup>1</sup>	
BIOL 410	Animal Physiology with Lab <sup>1</sup>	
BIOL 430	Pathogenic Microbiology with Lab <sup>1</sup>	
BIOL 451	Plant Physiology/Lab <sup>1</sup>	
BIOL 465	<sup>1</sup>	
BIOL 470	Histology with Lab <sup>1</sup>	
Subtotal		21

### Related Sciences – Chemistry

CHEM 108	General Chemistry II <sup>2</sup>	3
CHEM 112	General Chemistry II Lab <sup>2</sup>	1
CHEM 201	Organic Chemistry I <sup>2</sup>	3
CHEM 202	Organic Chemistry II <sup>2</sup>	3
CHEM 211	Organic Chemistry Laboratory I <sup>2</sup>	1
CHEM 212	Organic Chemistry Laboratory II <sup>2</sup>	1
Subtotal		12

### Related Sciences – Chemistry Advanced Elective

Select one of the following:		3
CHEM 335	Biochemistry I <sup>2</sup>	
CHEM 350	Analytical Chemistry <sup>2</sup>	
Subtotal		3

### Related Sciences - Physics

Select one of the following:		4
PHYS 202	Elements of Physics II/ Lab	
PHYS 217	University Physics 2 with Lab	
Subtotal		4

### Independent Study Options

Select one of the following options:		3
<i>Independent Study Option</i>		
BIOL 490	Independent Study	
<i>Non-Independent Study Option</i>		

Select 3 credits in BIOL or MARS course from Additional Upper-Level Biology Electives below.

Upper-Level Biology Electives (p. 295)		
Subtotal		3

### Major Field Test

Field Test required of all Biology students before graduation.

<b>Total Hours</b>		<b>59</b>
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- <sup>1</sup> Course counts for 50% of Major requirements and Major GPA
- <sup>2</sup> Course counts for 50% of Major requirements but not for Major GPA
- <sup>3</sup> Course counts in Core GPA
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
MATH 125	Precalculus	4
or MATH 225	Calculus I	
PHYS 201	Elements of Physics I with Lab	4
or PHYS 216	University Physics 1 with Lab	

## Recommended Free Electives

Elective courses may be selected with your adviser based on your chosen medical specialization

Code	Title	Hours
BIOL 216	Anatomy and Physiology I with Lab	3
BIOL 217	Anatomy and Physiology II with Lab	3
CHEM 425	Instrumental Analysis	3
HCAM 250	Medical Terminology for Healthcare Administrators	3
or EXSC 250	Medical Terminology	
HLTH 314	Nutrition and Health	3
PHIL 325	Medical/Health Care Ethics	3

## Additional Upper-Level Biology Electives

Code	Title	Hours
BIOL 301	Forest Ecology <sup>1</sup>	3
BIOL 302	Ecology of Amphibians & Reptiles/Lab <sup>1</sup>	3
BIOL 303	Behavioral Ecology/Lab <sup>1</sup>	3
BIOL 305	Wetlands and Aquatic Plants/Lab <sup>1</sup>	3
BIOL 306	Freshwater Biomonitoring/Lab <sup>1</sup>	3
BIOL 307	Vertebrate Ecology/Lab <sup>1</sup>	3
BIOL 308	Aquatic Ecosystem Management / Lab <sup>1</sup>	3
BIOL 310	Plant Systematics with Lab <sup>1</sup>	3
BIOL 311	Entomology/Lab <sup>1</sup>	3
BIOL 313	Herpetology/Lab <sup>1</sup>	3
BIOL 314	Medical Parasitology with Lab <sup>1</sup>	1
BIOL 315	<sup>1</sup>	1
BIOL 316	Medical Immunology with Lab <sup>1</sup>	1
BIOL 317	Ecology and Fungi <sup>1</sup>	3
BIOL 320	Ornithology/Lab <sup>1</sup>	3
BIOL 321	Wildlife Management/Lab <sup>1</sup>	3
BIOL 322	Conservation Biology/Lab <sup>1</sup>	3
BIOL 323	Stream Ecology/Lab <sup>1</sup>	3
BIOL 326	Field Methods in Biogeography/Lab <sup>1</sup>	3
BIOL 327	Limnology/Lab <sup>1</sup>	3
BIOL 331	Mammology/Lab <sup>1</sup>	3
BIOL 343	Embryology with Lab <sup>1</sup>	3

BIOL 345	<sup>1</sup>	2
BIOL 350	Evolution <sup>1</sup>	3
BIOL 356	Field Ecology / Lab <sup>1</sup>	3
BIOL 357	Environmental Microbiology with Lab <sup>1</sup>	4
BIOL 360	Field Botany <sup>1</sup>	3
BIOL 361	Flora of Western Pennsylvania <sup>1</sup>	3
BIOL 371	Vertebrate Field Zoology <sup>1</sup>	3
BIOL 373	Ichthyology/Lab <sup>1</sup>	3
BIOL 375	Ecology of Fish / Lab <sup>1</sup>	3
BIOL 400	Disease Ecology <sup>1</sup>	3
BIOL 402	Biogeography/Lab <sup>1</sup>	3
BIOL 405	Animal Physiological Ecology with Lab <sup>1</sup>	4
BIOL 412	Population Biology <sup>1</sup>	3
BIOL 430	Pathogenic Microbiology with Lab <sup>1</sup>	3
BIOL 450	Biology Internship <sup>1</sup>	3
BIOL 465	<sup>1</sup>	3
BIOL 470	Histology with Lab <sup>1</sup>	3
BIOL 498	Selected Topics <sup>1</sup>	3
MARS 300	Behavior of Marine Organisms <sup>1</sup>	3
MARS 310	The Mammals of Coastal Ecosystems <sup>1</sup>	3
MARS 320	Marine Microbiology <sup>1</sup>	3
MARS 330	Tropical Invertebrates	3
MARS 342	Marine Botany <sup>1</sup>	3
MARS 343	Marine Ichthyology <sup>1</sup>	3
MARS 344	Anatomy of Marine Chordates <sup>1</sup>	3
MARS 345	Ornithology <sup>1</sup>	3
MARS 350	Physiology of Marine Invertebrates <sup>1</sup>	3
MARS 398	Selected Topics <sup>1</sup>	3
MARS 420	Marine Micropaleontology <sup>1</sup>	3
MARS 431	Ecology of Marine Plankton <sup>1</sup>	3
MARS 441	Biology of Molluscs <sup>1</sup>	3
MARS 490	Independent Study <sup>1</sup>	3
MARS 491	Coral Reef Ecology <sup>1</sup>	3
MARS 492	Marine Mammals <sup>1</sup>	3
MARS 498	Selected Topics <sup>1</sup>	3
MARS 500	Problems in Marine Science <sup>1</sup>	3

- <sup>1</sup> Course counts for 50% of Major requirements and Major GPA

## Co-Curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Student-faculty research
2. Internships
3. Volunteering
4. Job Shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum



categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

BIOLOGY - BS (6108)

Concentration in Biomedical Sciences (BMDS)

This program is effective as of Summer 2022

Revised 04.04.2022

UCC 02.01.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ESAP 101	FYRST Seminar <sup>8</sup>	1
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>14</b>
<b>Second Year</b>		
<b>Fall</b>		
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
BIOL 250	Genetics with Lab	4
CHEM 201	Organic Chemistry I	3
CHEM 211	Organic Chemistry Laboratory I	1
Humanities Inquiry (p. 29)		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
BIOL 325	Biometry with Lab	3
MATH 125 or MATH 225	Precalculus or Calculus I	4
CHEM 202	Organic Chemistry II	3
CHEM 212	Organic Chemistry Laboratory II	1
Social Science Inquiry (p. 29)		3
<b>Hours</b>		<b>14</b>

### Third Year

#### Fall

CHEM 335 or CHEM 350	Biochemistry I or Analytical Chemistry	3
PHYS 201 or PHYS 211	Elements of Physics I with Lab or General Physics I with Lab	4
BIOL 300+	Upper Level BIOL Elective	3
BIOL 300+	Upper Level BIOL Elective	3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>16</b>

#### Spring

PHYS 202 or PHYS 212	Elements of Physics II/ Lab or General Physics II with Lab	4
BIOL 300+	Upper Level BIOL Elective	3
BIOL 300+	Upper Level BIOL Elective	3
Thematic Thread Requirement (p. 29)		3
Free Elective		3
<b>Hours</b>		<b>16</b>

### Fourth Year

#### Fall

BIOL 300+	Upper Level BIOL Elective	3
BIOL 300+	Upper Level BIOL Elective	3
BIOL 300+	Upper Level BIOL Elective	3
Thematic Thread Requirement (p. 29)		3
Free Elective		3
<b>Hours</b>		<b>15</b>

#### Spring

BIOL 300+	Upper Level BIOL Elective	3
BIOL 490	Independent Study <sup>3</sup>	3
BIOL 492	Biology Seminar	1
Thematic Thread Requirement (p. 29)		3
Free Elective		3
Free Elective		3
<b>Hours</b>		<b>16</b>
<b>Total Hours**</b>		<b>120</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>3</sup> or BIOL 300+:Upper Level BIOL Elective

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6108

Concentration Code: BMDS

Revised date: 04.21.22

# Biology, Bachelor of Science (BS) - Concentration in Histotechnology

## Program Learning Outcomes

- **Competence in Laboratory and Research Skills:** To conduct, assess, and communicate research investigations using established scientific practices.
- **Core Concepts for Biological Literacy:**
  - Knowledge/Content:
    - Evolution
    - Structure and function across all levels of biological organization
    - Diversity and interactions of life
    - Information flow, exchange and storage in biological systems
  - Critical Thinking/Problem Solving:
    - Connect information from cognate science courses and liberal arts courses to biological concepts
    - Apply scientific information to current and future societal problems
- **Participation in Diverse, Enriching Scientific Activities:** Apply technical and professional skills in hands-on laboratory, clinical or field experiences.
- **Professional Attitude:** Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.

## Related Links

Biology - Histotechnology, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/biology-histotechnology/>)

Biology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/biology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

Core GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	60
	Natural Science and Math College-Wide Requirements	12
	Electives	15

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 125	Precalculus	4
or MATH 225	Calculus I	
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
<i>Physical Sciences Inquiry</i>		
PHYS 201	Elements of Physics I with Lab	4
or PHYS 216	University Physics 1 with Lab	
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>45</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- 60 credits = 42 coursework credits; 14 clinical credits
- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above
- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Students must earn a "C" or better in both Biology I with Lab (BIOL 113) and Biology II with Lab (BIOL 114) before proceeding to their next biology course.
- Students must earn a "C" or better in both Genetics with Lab (BIOL 250) and Biometry with Lab (BIOL 325) prior to graduating.
- To view the SRU policy on senior undergraduate students earning graduate credit, click here (<https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/>).

Code	Title	Hours
<b>Biology Core Requirements</b>		
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 250	Genetics with Lab <sup>1,2</sup>	4
BIOL 325	Biometry with Lab	3
Subtotal		15

### Required Upper-Level Biology

BIOL 216	Anatomy and Physiology I with Lab	3
BIOL 217	Anatomy and Physiology II with Lab	3
BIOL 316	Medical Immunology with Lab <sup>1</sup>	1
BIOL 335	Cell Biology/Lab <sup>1</sup>	3
BIOL 470	Histology with Lab <sup>1</sup>	3
Subtotal		13

### Upper-Level Biology Elective

Students must take 2 of the following courses:		2
BIOL 314	Medical Parasitology with Lab <sup>1</sup>	
BIOL 315	<sup>1</sup>	
BIOL 319	Medical Virology with a Lab <sup>1</sup>	

Subtotal	2
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### Related Sciences - Chemistry

CHEM 108	General Chemistry II <sup>3</sup>	3
CHEM 112	General Chemistry II Lab <sup>3</sup>	1
CHEM 201	Organic Chemistry I <sup>3</sup>	3
CHEM 202	Organic Chemistry II <sup>3</sup>	3
CHEM 211	Organic Chemistry Laboratory I <sup>3</sup>	1
CHEM 212	Organic Chemistry Laboratory II <sup>3</sup>	1
Subtotal		12

### Related Sciences - Physics

PHYS 202	Elements of Physics II/ Lab	4
or PHYS 217	University Physics 2 with Lab	

### Clinical Experience (14 credits to complete 120 hrs in degree)

Minimum of 91 hrs on campus plus 1 yr (12 months) at an affiliated School of Histotechnology or one acceptable to SRU

NSM 390	Experimental <sup>3</sup>	14
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<b>Total Hours</b>	<b>60</b>
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- <sup>1</sup> Course counts for 50% of Major requirements and Major GPA
- <sup>2</sup> Core GPA
- <sup>3</sup> Course counts for 50% of Major requirements but not for Major GPA
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
MATH 125	Precalculus	4
or MATH 225	Calculus I	
PHYS 201	Elements of Physics I with Lab	4
or PHYS 216	University Physics 1 with Lab	

## Electives

Code	Title	Hours
NSM 390	Clinical Experience	14

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Career education and development
2. Student-faculty research
3. Volunteering
4. Job Shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to

ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

BIOLOGY - BS (6108)

Concentration in Histotechnology (HTEC)

This program is effective as of Summer 2022

Revised 04.20.22

UCC 2.1.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ESAP 101	FYRST Seminar *	1
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
MATH 125 or MATH 225	Precalculus or Calculus I	4
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
BIOL 250	Genetics with Lab	4
BIOL 216	Anatomy and Physiology I with Lab	3
CHEM 201	Organic Chemistry I	3
CHEM 211	Organic Chemistry Laboratory I	1
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
BIOL 335	Cell Biology/Lab	3
BIOL 325	Biometry with Lab	3
CHEM 202	Organic Chemistry II	3
CHEM 212	Organic Chemistry Laboratory II	1
Social Science Inquiry (p. 29)		3
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>

### Third Year

#### Fall

BIOL 217	Anatomy and Physiology II with Lab	3
PHYS 201 or PHYS 216	Elements of Physics I with Lab or University Physics 1 with Lab	4
Humanities Inquiry (p. 29)		3
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>16</b>

#### Spring

Select two of the following:		2
BIOL 314	Medical Parasitology with Lab	
BIOL 315		
BIOL 319	Medical Virology with a Lab	
BIOL 316	Medical Immunology with Lab	1
BIOL 470	Histology with Lab	3
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>12</b>

### Fourth Year

#### Fall

NSM 390	School of Histology	16
<b>Hours</b>		<b>16</b>

#### Spring

NSM 390	School of Histology	16
<b>Hours</b>		<b>16</b>
<b>Total Hours**</b>		<b>120</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6018

Concentration Code: HTEC

Revised date: 04.21.22

## Biology, Bachelor of Science (BS) - Concentration in Medical Technology Program Learning Outcomes

- **Competence in Laboratory and Research Skills:** To conduct, assess, and communicate research investigations using established scientific practices.
- **Core Concepts for Biological Literacy:**

- **Knowledge/Content:**
  - Evolution
  - Structure and function across all levels of biological organization
  - Diversity and interactions of life
  - Information flow, exchange and storage in biological systems
- **Critical Thinking/Problem Solving:**
  - Connect information from cognate science courses and liberal arts courses to biological concepts
  - Apply scientific information to current and future societal problems
- **Participation in Diverse, Enriching Scientific Activities:** Apply technical and professional skills in hands-on laboratory, clinical or field experiences.
- **Professional Attitude:** Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.

## Related Links

Biology - Medical Technology, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/biology-medical-technology/>)

Biology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/biology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher  
Overall GPA: 2.0 or higher  
Core GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	60
	Natural Science and Math College-Wide Requirements	12
	Electives	15

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 125	Precalculus	4
or MATH 225	Calculus I	
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	

PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
<i>Physical Sciences Inquiry</i>		
PHYS 201	Elements of Physics I with Lab	4
or PHYS 216	University Physics 1 with Lab	
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>45</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>



## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- 60 credits = 42 coursework credits; 18 clinical credits
- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above
- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Students must earn a "C" or better in both Biology I with Lab (BIOL 113) and Biology II with Lab (BIOL 114) before proceeding to their next biology course.
- Students must earn a "C" or better in both Genetics with Lab (BIOL 250) and Biometry with Lab (BIOL 325) prior to graduating.
- To view the SRU policy on senior undergraduate students earning graduate credit, click here (<https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/>).

Code	Title	Hours
<b>Biology Core Requirements</b>		
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 250	Genetics with Lab <sup>1,2</sup>	4
BIOL 325	Biometry with Lab	3
Subtotal		15
<b>Required Upper-Level Biology</b>		
BIOL 216	Anatomy and Physiology I with Lab	3
BIOL 217	Anatomy and Physiology II with Lab	3
BIOL 316	Medical Immunology with Lab <sup>1</sup>	1
BIOL 330	Microbiology/Lab <sup>1</sup>	3
BIOL 335	Cell Biology/Lab <sup>1</sup>	3
or BIOL 370	Molecular Biology with Lab	
Subtotal		13
<b>Upper-Level Biology Elective</b>		
Students must take 2 of the following courses:		2
BIOL 314	Medical Parasitology with Lab <sup>1</sup>	
BIOL 315	<sup>1</sup>	
BIOL 319	Medical Virology with a Lab <sup>1</sup>	
Subtotal		2
<b>Related Sciences - Chemistry</b>		
CHEM 108	General Chemistry II <sup>3</sup>	3
CHEM 112	General Chemistry II Lab <sup>3</sup>	1
CHEM 201	Organic Chemistry I <sup>3</sup>	3
CHEM 202	Organic Chemistry II <sup>3</sup>	3
CHEM 211	Organic Chemistry Laboratory I <sup>3</sup>	1
CHEM 212	Organic Chemistry Laboratory II <sup>3</sup>	1
Subtotal		12
<b>Related Sciences - Physics</b>		
PHYS 202	Elements of Physics II/ Lab	4
or PHYS 217	University Physics 2 with Lab	

## Clinical Experience (14 credits to complete 120 hrs in degree)

Minimum of 91 hrs on campus plus 1 yr (12 months) at an affiliated School of Medical Technology or one acceptable to SRU

NSM 390	Experimental <sup>3</sup>	14
<b>Total Hours</b>		<b>60</b>

- <sup>1</sup> Course counts for 50% of Major requirements and Major GPA
  - <sup>2</sup> Core GPA
  - <sup>3</sup> Course counts for 50% of Major requirements but not for Major GPA
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
MATH 125	Precalculus	4
or MATH 225	Calculus I	
PHYS 201	Elements of Physics I with Lab	4
or PHYS 216	University Physics 1 with Lab	

## Electives

Code	Title	Hours
NSM 390	Clinical Experience	14

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Career education and development
2. Student-faculty research
3. Volunteering
4. Job Shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

BIOLOGY - BS (6108)

Concentration in Medical Technology (MEDT)

This program is effective as of Summer 2022

Revised 04.20.2022

UCC 02.01.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ESAP 101	FYRST Seminar <sup>*</sup>	1
<b>Hours</b>		<b>15</b>

<b>Spring</b>		
ENGL 104	Critical Reading	3
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
MATH 125 or MATH 225	Precalculus or Calculus I	4
<b>Hours</b>		<b>15</b>

<b>Second Year</b>		
<b>Fall</b>		
BIOL 250	Genetics with Lab	4
BIOL 216	Anatomy and Physiology I with Lab	3
CHEM 201	Organic Chemistry I	3
CHEM 211	Organic Chemistry Laboratory I	1
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>14</b>

<b>Spring</b>		
BIOL 217	Anatomy and Physiology II with Lab	3
BIOL 325	Biometry with Lab	3
CHEM 202	Organic Chemistry II	3
CHEM 212	Organic Chemistry Laboratory II	1
Creative & Aesthetic Inquiry (p. 29)		3
Social Science Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>

<b>Third Year</b>		
<b>Fall</b>		
BIOL 370	Molecular Biology with Lab	3
PHYS 201 or PHYS 216	Elements of Physics I with Lab or University Physics 1 with Lab	4
Humanities Inquiry (p. 29)		3
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>16</b>

<b>Spring</b>		
Select two of the following:		2

BIOL 314	Medical Parasitology with Lab	
BIOL 315		
BIOL 319	Medical Virology with a Lab	
BIOL 316	Medical Immunology with Lab	1
BIOL 330	Microbiology/Lab	3
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>12</b>

<b>Fourth Year</b>		
<b>Fall</b>		
NSM 390	School of Medical Technology	16
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
NSM 390	School of Medical Technology	16
<b>Hours</b>		<b>16</b>
<b>Total Hours**</b>		<b>120</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>\*</sup> Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6108

Concentration Code: MEDT

Revised date: 04.21.22

## Biology, Bachelor of Science (BS) - Concentration in Professional

### Program Learning Outcomes

- **Competence in Laboratory and Research Skills:** To conduct, assess, and communicate research investigations using established scientific practices.
- **Core Concepts for Biological Literacy:**
  - Knowledge/Content:
    - Evolution
    - Structure and function across all levels of biological organization
    - Diversity and interactions of life
    - Information flow, exchange and storage in biological systems
  - Critical Thinking/Problem Solving:
    - Connect information from cognate science courses and liberal arts courses to biological concepts
    - Apply scientific information to current and future societal problems
- **Participation in Diverse, Enriching Scientific Activities:** Apply technical and professional skills in hands-on laboratory, clinical or field experiences.

- **Professional Attitude:** Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.

## Related Links

Biology - Professional, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/biology-professional/>)

Biology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/biology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement - Biology

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

Core GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements/Concentration	59
	Natural Science and Math College-Wide Requirements	12
	Electives	16

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 125	Precalculus	4
or MATH 225	Calculus I	
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16

#### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1

#### Physical Sciences Inquiry

Subtotal		13
PHYS 201	Elements of Physics I with Lab	4
or PHYS 216	University Physics 1 with Lab	
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>45</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

### Major Requirements/Concentration

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above
- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Students must earn a "C" or better in both Biology I with Lab (BIOL 113) and Biology II with Lab (BIOL 114) before proceeding to their next biology course.

- Students must earn a "C" or better in both Genetics with Lab (BIOL 250) and Biometry with Lab (BIOL 325) prior to graduating.

Code	Title	Hours
<b>Biology Core Requirements</b>		
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 250	Genetics with Lab <sup>1,2</sup>	4
BIOL 325	Biometry with Lab <sup>1</sup>	3
Subtotal		15
<b>Required Upper-Level Biology</b>		
BIOL 492	Biology Seminar <sup>1</sup>	1
Subtotal		1
<b>Upper-Level Biology Electives</b>		
Select five courses of the following:		15
BIOL 330	Microbiology/Lab <sup>1</sup>	
BIOL 335	Cell Biology/Lab <sup>1</sup>	
BIOL 340	Vertebrate Anatomy with Lab <sup>1</sup>	
BIOL 370	Molecular Biology with Lab <sup>1</sup>	
BIOL 401	Ecology with Lab <sup>1</sup>	
BIOL 410	Animal Physiology with Lab <sup>1</sup>	
BIOL 451	Plant Physiology/Lab <sup>1</sup>	
Subtotal		15
<b>Additional Upper-Level Biology Electives</b>		
Select 6 credits which can come from courses not chosen above, or any 300/400 level course listed below. Additional electives may be selected from the Marine Science offerings listed below. PLE courses are only offered during the summer months through our affiliation with Pymatuning Laboratory of Ecology.		6
Upper-Level Biology Electives (p. 304)		
Subtotal		6
<b>Related Sciences – Chemistry</b>		
CHEM 108	General Chemistry II <sup>3</sup>	3
CHEM 112	General Chemistry II Lab <sup>3</sup>	1
CHEM 201	Organic Chemistry I <sup>3</sup>	3
CHEM 202	Organic Chemistry II <sup>3</sup>	3
CHEM 211	Organic Chemistry Laboratory I <sup>3</sup>	1
CHEM 212	Organic Chemistry Laboratory II <sup>3</sup>	1
Subtotal		12
<b>Related Sciences – Chemistry Advanced Elective</b>		
Select one of the following:		3
CHEM 301	Physical Chemistry I <sup>3</sup>	
CHEM 335	Biochemistry I <sup>3</sup>	
<b>Related Sciences – Biology</b>		
PHYS 202	Elements of Physics II/ Lab	4
or PHYS 217	University Physics 2 with Lab	
<b>Independent Study Option</b>		
Select one of the following options:		3
<i>Independent Study Option</i>		
BIOL 490	Independent Study <sup>3</sup>	
<i>Non-Independent Study Option</i>		

Select 3 credits in BIOL or MARS course from Additional Upper-Level Biology Electives below.

#### Upper-Level Biology Electives (p. 304)

#### Major Field Test

Field Test required of all Biology students before graduation

**Total Hours** **59**

- 1 Course counts for 50% of Major requirements and Major GPA
  - 2 Core GPA
  - 3 Course counts for 50% of Major requirements but not for Major GPA
  - 4 With the exception of BIOL 300, BIOL 314, BIOL 315, BIOL 316, BIOL 319, BIOL 345
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Natural Science and Math College-Wide Requirements

Code	Title	Hours
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
MATH 225	Calculus I	4
PHYS 201	Elements of Physics I with Lab	4
or PHYS 216	University Physics 1 with Lab	

### Additional Upper-Level Biology Electives

Code	Title	Hours
BIOL 301	Forest Ecology <sup>1</sup>	3
BIOL 302	Ecology of Amphibians & Reptiles/Lab <sup>1</sup>	3
BIOL 303	Behavioral Ecology/Lab <sup>1</sup>	3
BIOL 305	Wetlands and Aquatic Plants/Lab <sup>1</sup>	3
BIOL 306	Freshwater Biomonitoring/Lab <sup>1</sup>	3
BIOL 307	Vertebrate Ecology/Lab <sup>1</sup>	3
BIOL 308	Aquatic Ecosystem Management / Lab <sup>1</sup>	3
BIOL 310	Plant Systematics with Lab <sup>1</sup>	3
BIOL 311	Entomology/Lab <sup>1</sup>	3
BIOL 313	Herpetology/Lab <sup>1</sup>	3
BIOL 314	Medical Parasitology with Lab <sup>1</sup>	1
BIOL 315	<sup>1</sup>	1
BIOL 316	Medical Immunology with Lab <sup>1</sup>	1
BIOL 317	Ecology and Fungi <sup>1</sup>	3
BIOL 319	Medical Virology with a Lab	1
BIOL 320	Ornithology/Lab <sup>1</sup>	3
BIOL 321	Wildlife Management/Lab <sup>1</sup>	3
BIOL 322	Conservation Biology/Lab <sup>1</sup>	3
BIOL 323	Stream Ecology/Lab <sup>1</sup>	3
BIOL 326	Field Methods in Biogeography/Lab <sup>1</sup>	3
BIOL 327	Limnology/Lab <sup>1</sup>	3
BIOL 331	Mammology/Lab <sup>1</sup>	3
BIOL 343	Embryology with Lab <sup>1</sup>	3
BIOL 345	<sup>1</sup>	2
BIOL 350	Evolution <sup>1</sup>	3
BIOL 356	Field Ecology / Lab <sup>1</sup>	3
BIOL 357	Environmental Microbiology with Lab <sup>1</sup>	4

BIOL 360	Field Botany <sup>1</sup>	3
BIOL 361	Flora of Western Pennsylvania <sup>1</sup>	3
BIOL 371	Vertebrate Field Zoology <sup>1</sup>	3
BIOL 373	Ichthyology/Lab <sup>1</sup>	3
BIOL 375	Ecology of Fish / Lab <sup>1</sup>	3
BIOL 402	Biogeography/Lab <sup>1</sup>	3
BIOL 405	Animal Physiological Ecology with Lab <sup>1</sup>	4
BIOL 412	Population Biology <sup>1</sup>	3
BIOL 430	Pathogenic Microbiology with Lab <sup>1</sup>	3
BIOL 450	Biology Internship <sup>1</sup>	3
BIOL 465	<sup>1</sup>	3
BIOL 470	Histology with Lab <sup>1</sup>	3
BIOL 498	Selected Topics <sup>1</sup>	3
MARS 221	Marine Invertebrates <sup>1</sup>	3
MARS 241	Marine Biology <sup>1</sup>	3
MARS 250	Wetland Ecology <sup>1</sup>	3
MARS 260	Marine Ecology <sup>1</sup>	3
MARS 270	Coastal Vegetation <sup>1</sup>	3
MARS 298	Selected Topics <sup>1</sup>	3
MARS 300	Behavior of Marine Organisms <sup>1</sup>	3
MARS 310	The Mammals of Coastal Ecosystems <sup>1</sup>	3
MARS 320	Marine Microbiology <sup>1</sup>	3
MARS 330	Tropical Invertebrates <sup>1</sup>	3
MARS 342	Marine Botany <sup>1</sup>	3
MARS 343	Marine Ichthyology <sup>1</sup>	3
MARS 344	Anatomy of Marine Chordates <sup>1</sup>	3
MARS 345	Ornithology <sup>1</sup>	3
MARS 350	Physiology of Marine Invertebrates <sup>1</sup>	3
MARS 398	Selected Topics <sup>1</sup>	3
MARS 420	Marine Micropaleontology <sup>1</sup>	3
MARS 431	Ecology of Marine Plankton <sup>1</sup>	3
MARS 441	Biology of Molluscs <sup>1</sup>	3
MARS 490	Independent Study <sup>1</sup>	3
MARS 491	Coral Reef Ecology <sup>1</sup>	3
MARS 492	Marine Mammals <sup>1</sup>	3
MARS 498	Selected Topics <sup>1</sup>	3
MARS 500	Problems in Marine Science <sup>1</sup>	3

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Student-faculty research
2. Internships
3. Volunteering
4. Job Shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-

earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

BIOLOGY - Professional (PRFL) - BS (6108)

This program is effective as of Summer 2022.

Revised 03.31.2022

UCC 2.1.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ESAP 101	FIRST Seminar *	1
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>14</b>
<b>Second Year</b>		
<b>Fall</b>		
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
BIOL 250	Genetics with Lab	4
CHEM 201	Organic Chemistry I	3
CHEM 211	Organic Chemistry Laboratory I	1
Humanities Inquiry (p. 29)		3
Social Science Inquiry (p. 29)		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
CHEM 202	Organic Chemistry II	3
CHEM 212	Organic Chemistry Laboratory II	1
BIOL 325	Biometry with Lab	3
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>13</b>



**Third Year****Fall**

Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
CHEM 335 or CHEM 301	Biochemistry I or Physical Chemistry 1	3
BIOL 300+	Upper Level BIOL Elective	3
BIOL 300+	Upper Level BIOL Elective	3
<b>Hours</b>		<b>15</b>

**Spring**

MATH 225 or MATH 125	Calculus I or Precalculus	4
BIOL 300+	Upper Level BIOL Elective	3
BIOL 300+	Upper Level BIOL Elective	3
Free Elective		3
Free Elective		3
<b>Hours</b>		<b>16</b>

**Fourth Year****Fall**

PHYS 201 or PHYS 216	Elements of Physics I with Lab or University Physics 1 with Lab	4
BIOL 300+	Upper Level BIOL Elective	3
BIOL 300+	Upper Level BIOL Elective	3
Free Elective		3
Free Elective		3
<b>Hours</b>		<b>16</b>

**Spring**

Free Elective		3
PHYS 202 or PHYS 217	Elements of Physics II/ Lab or University Physics 2 with Lab	4
BIOL 300+	Upper Level BIOL Elective	3
BIOL 490	Independent Study <sup>4</sup>	3
BIOL 492	Biology Seminar	1
<b>Hours</b>		<b>14</b>
<b>Total Hours**</b>		<b>120</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>3</sup> or BIOL 300/400 level (except BIOL 300, BIOL 314, BIOL 315, BIOL 316, BIOL 319, or BIOL 345).

<sup>4</sup> or BIOL 300+:Upper Level BIOL Elective

\* Students are encouraged to take ESAP 101 as a Free Elective.

Major Code: 6108

Concentration Code: PRFL

Revised date: 04.21.22

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

## Biology, Bachelor of Science (BS) - Concentration in Professional - Concentration in Bioinformatics Program Learning Outcomes

- **Competence in Laboratory and Research Skills:** To conduct, assess, and communicate research investigations using established scientific practices.
- **Core Concepts for Biological Literacy:**
  - Knowledge/Content:
    - Evolution
    - Structure and function across all levels of biological organization
    - Diversity and interactions of life
    - Information flow, exchange and storage in biological systems
  - Critical Thinking/Problem Solving:
    - Connect information from cognate science courses and liberal arts courses to biological concepts
    - Apply scientific information to current and future societal problems
- **Participation in Diverse, Enriching Scientific Activities:** Apply technical and professional skills in hands-on laboratory, clinical or field experiences.
- **Professional Attitude:** Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.

## Related Links

Biology - Professional - Bioinformatics, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/biology-bioinformatics-and-computational-biology/>)

Biology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/biology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

Core GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements/Concentration	59
	Natural Science and Math College-Wide Requirements	12
	Electives	16

\* All undergraduate degree programs require a minimum of 120 credits.  
Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	University Seminar <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 125	Precalculus	4
or MATH 225	Calculus I	
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
<i>Physical Sciences Inquiry</i>		
PHYS 201	Elements of Physics I with Lab	4
or PHYS 216	University Physics 1 with Lab	
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>45</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements/Concentration

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above
- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Students must earn a "C" or better in both Biology I with Lab (BIOL 113) and Biology II with Lab (BIOL 114) before proceeding to their next biology course.
- Students must earn a "B" or better in both Genetics with Lab (BIOL 250) and Biometry with Lab (BIOL 325) prior to graduating.

Code	Title	Hours
<b>Biology Core Requirements</b>		
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 250	Genetics with Lab <sup>1,2</sup>	4
BIOL 325	Biometry with Lab	3
Subtotal		15
<b>Required Upper-Level Biology</b>		
BIOL 492	Biology Seminar <sup>1</sup>	1
Subtotal		1
<b>Upper-Level Biology Electives</b>		
Select five courses of the following:		15
BIOL 330	Microbiology/Lab <sup>1</sup>	
BIOL 335	Cell Biology/Lab <sup>1</sup>	
BIOL 340	Vertebrate Anatomy with Lab <sup>1</sup>	
BIOL 370	Molecular Biology with Lab <sup>1</sup>	
BIOL 401	Ecology with Lab <sup>1</sup>	
BIOL 410	Animal Physiology with Lab <sup>1</sup>	
BIOL 451	Plant Physiology/Lab <sup>1</sup>	
Subtotal		15
<b>Additional Upper-Level Biology Electives</b>		

Select six credits which can come from courses not chosen above, or any 300/400 level course listed below. Additional electives may be selected from the Marine Science offerings listed below. PLE courses are only offered during the summer months through our affiliation with Pymatuning Laboratory of Ecology.

Upper-Level Electives (p. 308)		
Subtotal		6
Related Sciences – Chemistry		
CHEM 108	General Chemistry II <sup>3</sup>	3
CHEM 112	General Chemistry II Lab <sup>3</sup>	1
CHEM 201	Organic Chemistry I <sup>3</sup>	3
CHEM 202	Organic Chemistry II <sup>3</sup>	3
CHEM 211	Organic Chemistry Laboratory I <sup>3</sup>	1
CHEM 212	Organic Chemistry Laboratory II <sup>3</sup>	1
Subtotal		12
Related Sciences – Chemistry Advanced Elective		
Select one of the following:		
CHEM 301	Physical Chemistry I <sup>3</sup>	3
CHEM 335	Biochemistry I <sup>3</sup>	
Related Sciences – Physics		
Select one of the following:		
PHYS 202	Elements of Physics II/ Lab	
PHYS 217	University Physics 2 with Lab	
Independent Study Option		
Select one of the following options:		
<i>Independent Study Option</i>		
BIOL 490	Independent Study <sup>3</sup>	
<i>Non-Independent Study Option</i>		
Select 3 credits BIOL or MARS course from Additional Upper-Level Biology Electives below.		
Upper-Level Biology Electives (p. 308)		
Subtotal		10
Major Field Test		
Field Test required of all Biology students before graduation.		
<b>Total Hours</b>		<b>59</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> Core GPA

<sup>3</sup> Course counts for 50% of Major requirements but not for Major GPA

<sup>4</sup> With the exception of BIOL 300, BIOL 314, BIOL 315, BIOL 316, BIOL 319, BIOL 345

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
MATH 125	Precalculus	4
or MATH 225	Calculus I	

6	PHYS 201	Elements of Physics I with Lab	4
	or PHYS 216	University Physics 1 with Lab	

## Concentration in Bioinformatics Requirements

Code	Title	Hours
CPSC 146	Programming Principles	3
CPSC 246	Advanced Programming Principles	3
CPSC 374	Algorithms and Data Structures	3
CPSC 480	Topics in Computer Science: Machine Learning	3
MATH 230	Calculus II	4

## Additional Upper-Level Biology Electives

Code	Title	Hours
BIOL 301	Forest Ecology <sup>1</sup>	3
BIOL 302	Ecology of Amphibians & Reptiles/Lab <sup>1</sup>	3
BIOL 303	Behavioral Ecology/Lab <sup>1</sup>	3
BIOL 305	Wetlands and Aquatic Plants/Lab <sup>1</sup>	3
BIOL 306	Freshwater Biomonitoring/Lab <sup>1</sup>	3
BIOL 307	Vertebrate Ecology/Lab <sup>1</sup>	3
BIOL 308	Aquatic Ecosystem Management / Lab <sup>1</sup>	3
BIOL 310	Plant Systematics with Lab <sup>1</sup>	3
BIOL 311	Entomology/Lab <sup>1</sup>	3
BIOL 313	Herpetology/Lab <sup>1</sup>	3
BIOL 314	Medical Parasitology with Lab <sup>1</sup>	1
BIOL 315	<sup>1</sup>	1
BIOL 316	Medical Immunology with Lab <sup>1</sup>	1
BIOL 317	Ecology and Fungi <sup>1</sup>	3
BIOL 319	Medical Virology with a Lab	1
BIOL 320	Ornithology/Lab <sup>1</sup>	3
BIOL 321	Wildlife Management/Lab <sup>1</sup>	3
BIOL 322	Conservation Biology/Lab <sup>1</sup>	3
BIOL 323	Stream Ecology/Lab <sup>1</sup>	3
BIOL 326	Field Methods in Biogeography/Lab <sup>1</sup>	3
BIOL 327	Limnology/Lab <sup>1</sup>	3
BIOL 331	Mammalogy/Lab <sup>1</sup>	3
BIOL 343	Embryology with Lab <sup>1</sup>	3
BIOL 345	<sup>1</sup>	2
BIOL 350	Evolution <sup>1</sup>	3
BIOL 356	Field Ecology / Lab <sup>1</sup>	3
BIOL 357	Environmental Microbiology with Lab <sup>1</sup>	4
BIOL 360	Field Botany <sup>1</sup>	3
BIOL 361	Flora of Western Pennsylvania <sup>1</sup>	3
BIOL 371	Vertebrate Field Zoology <sup>1</sup>	3
BIOL 373	Ichthyology/Lab <sup>1</sup>	3
BIOL 375	Ecology of Fish / Lab <sup>1</sup>	3
BIOL 402	Biogeography/Lab <sup>1</sup>	3
BIOL 405	Animal Physiological Ecology with Lab <sup>1</sup>	4
BIOL 412	Population Biology <sup>1</sup>	3
BIOL 430	Pathogenic Microbiology with Lab <sup>1</sup>	3
BIOL 450	Biology Internship <sup>1</sup>	3
BIOL 465	<sup>1</sup>	3
BIOL 470	Histology with Lab <sup>1</sup>	3

BIOL 498	Selected Topics <sup>1</sup>	3
MARS 221	Marine Invertebrates <sup>1</sup>	3
MARS 241	Marine Biology <sup>1</sup>	3
MARS 250	Wetland Ecology <sup>1</sup>	3
MARS 260	Marine Ecology <sup>1</sup>	3
MARS 270	Coastal Vegetation <sup>1</sup>	3
MARS 298	Selected Topics <sup>1</sup>	3
MARS 300	Behavior of Marine Organisms <sup>1</sup>	3
MARS 310	The Mammals of Coastal Ecosystems <sup>1</sup>	3
MARS 320	Marine Microbiology <sup>1</sup>	3
MARS 330	Tropical Invertebrates	3
MARS 342	Marine Botany <sup>1</sup>	3
MARS 343	Marine Ichthyology <sup>1</sup>	3
MARS 344	Anatomy of Marine Chordates <sup>1</sup>	3
MARS 345	Ornithology <sup>1</sup>	3
MARS 350	Physiology of Marine Invertebrates <sup>1</sup>	3
MARS 398	Selected Topics <sup>1</sup>	3
MARS 420	Marine Micropaleontology <sup>1</sup>	3
MARS 431	Ecology of Marine Plankton <sup>1</sup>	3
MARS 441	Biology of Molluscs <sup>1</sup>	3
MARS 490	Independent Study <sup>1</sup>	3
MARS 491	Coral Reef Ecology <sup>1</sup>	3
MARS 492	Marine Mammals <sup>1</sup>	3
MARS 498	Selected Topics <sup>1</sup>	3
MARS 500	Problems in Marine Science <sup>1</sup>	3

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Student-faculty research
2. Internships
3. Volunteering
4. Job Shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

BIOLOGY - BS (6108)

Concentration in Professional (PRFL)

w/optional Concentration in Bioinformatics (BIIF)

This program is effective as of Summer 2022.

Revised 04.04.2022

UCC 02.01.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
BIOL 104		4
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ESAP 101	FIRST Seminar *	1
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
Select one 200-level Core Course:		4
BIOL 201	General Botany with Lab	
BIOL 212	General Zoology with Lab	
BIOL 250	Genetics with Lab	
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>14</b>
<b>Second Year</b>		
<b>Fall</b>		
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Select one 200-level Core Course:		4
BIOL 201	General Botany with Lab	
BIOL 212	General Zoology with Lab	
BIOL 250	Genetics with Lab	
CHEM 201	Organic Chemistry I	3
CHEM 211	Organic Chemistry Laboratory I	1
Humanities Inquiry (p. 29)		3
Social Science Inquiry (p. 29)		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
Select one 200-level Core Course:		4
BIOL 201	General Botany with Lab	
BIOL 212	General Zoology with Lab	
BIOL 250	Genetics with Lab	
CHEM 202	Organic Chemistry II	3
CHEM 212	Organic Chemistry Laboratory II	1
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>14</b>

**Third Year****Fall**

CHEM 335 or CHEM 301	Biochemistry I or Physical Chemistry 1	3
BIOL 300+	Upper Level BIOL Elective	3
BIOL 300+	Upper Level BIOL Elective	3
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>

**Spring**

MATH 225	Calculus I	4
BIOL 300+	Upper Level BIOL Elective	3
BIOL 300+	Upper Level BIOL Elective	3
Free Elective		3
Free Elective		2
<b>Hours</b>		<b>15</b>

**Fourth Year****Fall**

PHYS 211	General Physics I with Lab	4
BIOL 300+	Upper Level BIOL Elective	3
BIOL 300+	Upper Level BIOL Elective	3
Free Elective		3
Free Elective		3
<b>Hours</b>		<b>16</b>

**Spring**

Free Elective		3
PHYS 213	General Physics III/ Lab <sup>3</sup>	4
BIOL 300+	Upper Level BIOL Elective	3
BIOL 490	Independent Study <sup>4</sup>	3
BIOL 492	Biology Seminar	1
<b>Hours</b>		<b>14</b>
<b>Total Hours**</b>		<b>120</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>3</sup> or BIOL 300/400 level (except BIOL 300, BIOL 314, BIOL 315, BIOL 316, BIOL 319, or BIOL 345).

<sup>4</sup> or BIOL 300+:Upper Level BIOL Elective

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6108

Concentration Code: PRFL

Revised date: 04.21.22

## Biology, Bachelor of Science (BS) - Concentration in Professional / Antigua Medicine (4+4)

### Program Learning Outcomes

- **Competence in Laboratory and Research Skills:** To conduct, assess, and communicate research investigations using established scientific practices.
- **Core Concepts for Biological Literacy:**
  - Knowledge/Content:
    - Evolution
    - Structure and function across all levels of biological organization
    - Diversity and interactions of life
    - Information flow, exchange and storage in biological systems
  - Critical Thinking/Problem Solving:
    - Connect information from cognate science courses and liberal arts courses to biological concepts
    - Apply scientific information to current and future societal problems
- **Participation in Diverse, Enriching Scientific Activities:** Apply technical and professional skills in hands-on laboratory, clinical or field experiences.
- **Professional Attitude:** Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.

### Related Links

Biology - Antigua Medicine, BS Program Page ([https://www.sru.edu/academics/majors-and-minors/biology-pre-medicine-\(44\)/](https://www.sru.edu/academics/majors-and-minors/biology-pre-medicine-(44)/))

Biology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/biology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

### Curriculum Guide

#### GPA Requirement

Overall GPA: 3.0 or higher Major GPA: 2.0 Pre-requisite GPA: 3.0 or higher No "F" or "D" grade in any pre-requisite course

#### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements/Concentration	59
	Natural Science and Math College-Wide Requirements	12
	Electives	16

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.



## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 125	Precalculus	4
or MATH 225	Calculus I	
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Science Inquiry</i>		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
<i>Physical Science Inquiry</i>		
PHYS 201	Elements of Physics I with Lab	4
or PHYS 216	University Physics 1 with Lab	
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>45</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements/Concentration

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above
- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Students must earn a "C" or better in both Biology I with Lab (BIOL 113) and Biology II with Lab (BIOL 114) before proceeding to their next biology course.
- Students must earn a "C" or better in both Genetics with Lab (BIOL 250) and Biometry with Lab (BIOL 325) prior to graduating.
- To view the SRU policy on senior undergraduate students earning graduate credit, click here (<https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/>).

Code	Title	Hours
<b>Biology Core Requirements</b>		
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 250	Genetics with Lab <sup>1,2</sup>	4
BIOL 325	Biometry with Lab	3
Subtotal		15
<b>Required Upper-Level Biology</b>		
BIOL 492	Biology Seminar <sup>1</sup>	1
Subtotal		1
<b>Upper-Level Biology Electives</b>		
Select five courses of the following:		15
BIOL 330	Microbiology/Lab <sup>1</sup>	
BIOL 335	Cell Biology/Lab <sup>1</sup>	
BIOL 340	Vertebrate Anatomy with Lab <sup>1</sup>	
BIOL 370	Molecular Biology with Lab <sup>1</sup>	
BIOL 401	Ecology with Lab <sup>1</sup>	
BIOL 410	Animal Physiology with Lab <sup>1</sup>	
BIOL 451	Plant Physiology/Lab <sup>1</sup>	
Subtotal		15

**Additional Upper-Level Biology Electives**

Select six credits from courses not chosen above, or any 300/400 level course listed below. Additional electives may be selected from the Marine Science offerings listed below. PLE courses are only offered during the summer months through our affiliation with Pymatuning Laboratory of Ecology.

Upper-Level Biology Electives (p. 312)		
Subtotal		6
Related Sciences – Chemistry		
CHEM 108	General Chemistry II <sup>4,5</sup>	3
CHEM 112	General Chemistry II Lab <sup>4</sup>	1
CHEM 201	Organic Chemistry I <sup>4</sup>	3
CHEM 202	Organic Chemistry II <sup>4</sup>	3
CHEM 211	Organic Chemistry Laboratory I <sup>4</sup>	1
CHEM 212	Organic Chemistry Laboratory II <sup>4</sup>	1
Subtotal		12

**Related Sciences – Chemistry Advanced Elective**

Select one of the following:

CHEM 301	Physical Chemistry I <sup>4</sup>	
CHEM 335	Biochemistry I <sup>4</sup>	

**Related Sciences – Physics**

PHYS 202	Elements of Physics II/ Lab	4
or PHYS 217	University Physics 2 with Lab	

**Independent Study Option**

Select one of the following options:

Independent Study Option		
BIOL 490	Independent Study	

**Non-Independent Study Option**

Select 3 credits in BIOL or MARS course from Additional Upper-Level Biology Electives below.

Upper-Level Biology Electives (p. 312)		
Major Field Test		
Field Test required of all Biology students before graduation		
<b>Total Hours</b>		<b>59</b>

- <sup>1</sup> Course counts for 50% of Major requirements and Major GPA
- <sup>2</sup> Core GPA
- <sup>3</sup> Additional electives may be selected from the Marine Science offerings listed below. PLE courses are only offered during the summer months through our affiliation with Pymatuning Laboratory of Ecology.
- <sup>4</sup> Course counts for 50% of Major requirements but not for Major GPA
- <sup>5</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.
- <sup>6</sup> With exception of BIOL 300, BIOL 314, BIOL 315, BIOL 316, BIOL 319, BIOL 345
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**Natural Science and Math College-Wide Requirements**

Code	Title	Hours
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1

MATH 125	Precalculus	4
or MATH 225	Calculus I	
PHYS 201	Elements of Physics I with Lab	4
or PHYS 216	University Physics 1 with Lab	

**Additional Upper-Level Biology Electives**

Code	Title	Hours
BIOL 301	Forest Ecology (PLE) <sup>1</sup>	3
BIOL 302	Ecology of Amphibians & Reptiles/Lab (PLE) <sup>1</sup>	3
BIOL 303	Behavioral Ecology/Lab (PLE) <sup>1</sup>	3
BIOL 305	Wetlands and Aquatic Plants/Lab <sup>1</sup>	3
BIOL 306	Freshwater Biomonitoring/Lab <sup>1</sup>	3
BIOL 307	Vertebrate Ecology/Lab (PLE) <sup>1</sup>	3
BIOL 308	Aquatic Ecosystem Management / Lab (PLE) <sup>1</sup>	3
BIOL 310	Plant Systematics with Lab <sup>1</sup>	3
BIOL 311	Entomology/Lab <sup>1</sup>	3
BIOL 313	Herpetology/Lab (PLE) <sup>1</sup>	3
BIOL 314	Medical Parasitology with Lab <sup>1</sup>	1
BIOL 315	<sup>1</sup>	1
BIOL 316	Medical Immunology with Lab <sup>1</sup>	1
BIOL 317	Ecology and Fungi (PLE) <sup>1</sup>	3
BIOL 319	Medical Virology with a Lab <sup>1</sup>	1
BIOL 320	Ornithology/Lab <sup>1</sup>	3
BIOL 321	Wildlife Management/Lab (PLE) <sup>1</sup>	3
BIOL 322	Conservation Biology/Lab (PLE) <sup>1</sup>	3
BIOL 323	Stream Ecology/Lab (PLE) <sup>1</sup>	3
BIOL 326	Field Methods in Biogeography/Lab (PLE) <sup>1</sup>	3
BIOL 327	Limnology/Lab (PLE) <sup>1</sup>	3
BIOL 331	Mammology/Lab (PLE) <sup>1</sup>	3
BIOL 343	Embryology with Lab <sup>1</sup>	3
BIOL 345	<sup>1</sup>	2
BIOL 350	Evolution <sup>1</sup>	3
BIOL 356	Field Ecology / Lab (PLE) <sup>1</sup>	3
BIOL 357	Environmental Microbiology with Lab <sup>1</sup>	4
BIOL 360	Field Botany <sup>1</sup>	3
BIOL 361	Flora of Western Pennsylvania (PLE) <sup>1</sup>	3
BIOL 371	Vertebrate Field Zoology <sup>1</sup>	3
BIOL 373	Ichthyology/Lab (PLE) <sup>1</sup>	3
BIOL 375	Ecology of Fish / Lab (PLE) <sup>1</sup>	3
BIOL 402	Biogeography/Lab (PLE) <sup>1</sup>	3
BIOL 405	Animal Physiological Ecology with Lab <sup>1</sup>	4
BIOL 412	Population Biology (PLE) <sup>1</sup>	3
BIOL 430	Pathogenic Microbiology with Lab <sup>1</sup>	3
BIOL 450	Biology Internship <sup>1</sup>	3
BIOL 465	<sup>1</sup>	3
BIOL 470	Histology with Lab <sup>1</sup>	3
BIOL 498	Selected Topics <sup>1</sup>	3
MARS 221	Marine Invertebrates <sup>1</sup>	3
MARS 241	Marine Biology <sup>1</sup>	3
MARS 250	Wetland Ecology <sup>1</sup>	3
MARS 260	Marine Ecology <sup>1</sup>	3

MARS 270	Coastal Vegetation <sup>1</sup>	3
MARS 298	Selected Topics <sup>1</sup>	3
MARS 300	Behavior of Marine Organisms <sup>1</sup>	3
MARS 310	The Mammals of Coastal Ecosystems <sup>1</sup>	3
MARS 320	Marine Microbiology <sup>1</sup>	3
MARS 330	Tropical Invertebrates	3
MARS 342	Marine Botany <sup>1</sup>	3
MARS 343	Marine Ichthyology <sup>1</sup>	3
MARS 344	Anatomy of Marine Chordates <sup>1</sup>	3
MARS 345	Ornithology <sup>1</sup>	3
MARS 350	Physiology of Marine Invertebrates <sup>1</sup>	3
MARS 398	Selected Topics <sup>1</sup>	3
MARS 420	Marine Micropaleontology <sup>1</sup>	3
MARS 431	Ecology of Marine Plankton <sup>1</sup>	3
MARS 441	Biology of Molluscs <sup>1</sup>	3
MARS 490	Independent Study <sup>1</sup>	3
MARS 491	Coral Reef Ecology <sup>1</sup>	3
MARS 492	Marine Mammals <sup>1</sup>	3
MARS 498	Selected Topics <sup>1</sup>	3
MARS 500	Problems in Marine Science <sup>1</sup>	3

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Student-faculty research
2. Internships
3. Volunteering
4. Job Shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

BIOLOGY - PROFESSIONAL - BS

American University of Antigua College of Medicine (4+4) (61AM)

This program is effective as of Summer 2022

Revised 04.20.2022

UCC 02.01.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ESAP 101	FYRST Seminar <sup>*</sup>	1
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>14</b>
<b>Second Year</b>		
<b>Fall</b>		
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
BIOL 250	Genetics with Lab	4
CHEM 201	Organic Chemistry I	3
CHEM 211	Organic Chemistry Laboratory I	1
Humanities Inquiry (p. 29)		3
Social Science Inquiry (p. 29)		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
BIOL 325	Biometry with Lab	3
CHEM 202	Organic Chemistry II	3
CHEM 212	Organic Chemistry Laboratory II	1
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>13</b>
<b>Third Year</b>		
<b>Fall</b>		
CHEM 335 or CHEM 301	Biochemistry I or Physical Chemistry I	3
BIOL 300+	Upper Level BIOL Elective	3
BIOL 300+	Upper Level BIOL Elective	3
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
MATH 225 or MATH 125	Calculus I or Precalculus	4

BIOL 300+	Upper Level BIOL Elective	3
BIOL 300+	Upper Level BIOL Elective	3
Free Elective		3
Free Elective		3
<b>Hours</b>		<b>16</b>

**Fourth Year****Fall**

PHYS 201 or PHYS 216	Elements of Physics I with Lab or University Physics 1 with Lab	4
BIOL 300+	Upper Level BIOL Elective	3
BIOL 300+	Upper Level BIOL Elective	3
Free Elective		3
Free Elective		3
<b>Hours</b>		<b>16</b>

**Spring**

PHYS 202 or PHYS 217	Elements of Physics II/ Lab or University Physics 2 with Lab	4
BIOL 300+	Upper Level BIOL Elective	3
BIOL 490	Independent Study <sup>4</sup>	3
BIOL 492	Biology Seminar	1
Free Elective		3
<b>Hours</b>		<b>14</b>

**Total Hours\*\*** **120**

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>3</sup> or BIOL 300/400 level (except BIOL 300, BIOL 314, BIOL 315, BIOL 316, BIOL 319, or BIOL 345).

<sup>4</sup> Students may elect to take a 300 or 400 Level Biology course

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6 08

Concentration Code: 61AM

Revised date: 04.21.22

## Biology, Bachelor of Science (BS) - Concentration in Professional / Pre-Chiropractic (Logan) (3+3)

### Program Learning Outcomes

- **Competence in Laboratory and Research Skills:** To conduct, assess, and communicate research investigations using established scientific practices.
- **Core Concepts for Biological Literacy:**

- **Knowledge/Content:**
  - Evolution
  - Structure and function across all levels of biological organization
  - Diversity and interactions of life
  - Information flow, exchange and storage in biological systems
- **Critical Thinking/Problem Solving:**
  - Connect information from cognate science courses and liberal arts courses to biological concepts
  - Apply scientific information to current and future societal problems
- **Participation in Diverse, Enriching Scientific Activities:** Apply technical and professional skills in hands-on laboratory, clinical or field experiences.
- **Professional Attitude:** Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.

### Related Links

Biology - Logan Pre-Chiropractic, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/biology-pre-chiropractic-33/>)

Biology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/biology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

### Curriculum Guide

#### GPA Requirement

Overall GPA: 3.0 or higher

Core GPA: 2.0 or higher

#### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	42
	Natural Science and Math College-Wide Requirement	12
	Electives	33

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the 1<sup>st</sup> year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.

#### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 125 or MATH 225	Precalculus Calculus I	4

Select one of the following:	3
COMM 200 Civil Discourse: Theory & Practice	
PHIL 110 Ethics and Civil Discourse	
POLS 235 Civil Discourse and Democracy	
Subtotal	16
<b>Integrated Inquiry</b>	
<i>Creative and Aesthetic Inquiry</i>	
Select 3 Credits (p. 29)	3
<i>Humanities Inquiry</i>	
Select 3 Credits (p. 29)	3
<i>Social Science Inquiry</i>	
Select 3 Credits (p. 29)	3
<i>Natural Sciences Inquiry</i>	
CHEM 107 General Chemistry I	3
CHEM 111 General Chemistry I Lab	1
<i>Physical Sciences Inquiry</i>	
PHYS 201 Elements of Physics I with Lab	4
or PHYS 216 University Physics 1 with Lab	
Subtotal	17
<b>Thematic Thread</b>	
Select 12 Credits (p. 29) <sup>2</sup>	12
<b>Total Hours</b>	<b>45</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	

PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Students must earn a "C" or better in both Biology I with Lab (BIOL 113) and Biology II with Lab (BIOL 114) before proceeding to their next biology course.
- Students must earn a "C" or better in both Genetics with Lab (BIOL 250) and Biometry with Lab (BIOL 325) prior to graduating.
- To view the SRU policy on senior undergraduate students earning graduate credit, click here (<https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/>).

Code	Title	Hours
<b>Biology Core Requirements</b>		
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 250	Genetics with Lab <sup>1</sup>	4
BIOL 325	Biometry with Lab	3
Subtotal		15
<b>Required Upper-Level Biology</b>		
BIOL 330	Microbiology/Lab	3
BIOL 340	Vertebrate Anatomy with Lab	3
or BIOL 410	Animal Physiology with Lab	
BIOL 492	Biology Seminar	1
Subtotal		7
<b>Required Chemistry Courses</b>		
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
CHEM 201	Organic Chemistry I	3
CHEM 202	Organic Chemistry II	3
CHEM 211	Organic Chemistry Laboratory I	1
CHEM 212	Organic Chemistry Laboratory II	1
CHEM 335	Biochemistry I	3
Subtotal		15
<b>Required Physics Course</b>		
PHYS 202	Elements of Physics II/ Lab	4
or PHYS 217	University Physics 2 with Lab	
<b>Major Field Test</b>		
Field Test required of all Biology students before graduation		
<b>Total Hours</b>		<b>41</b>



<sup>1</sup> Core GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
MATH 125	Precalculus	4
or MATH 225	Calculus I	
PHYS 201	Elements of Physics I with Lab	4
or PHYS 216	University Physics 1 with Lab	

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Volunteering
2. Job Shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

BIOLOGY - PROFESSIONAL - BS (6108)

Logan Chiropractic (3+3.3) (61LC)

This program is effective as of Summer 2022

Revised 04.20.2022

UCC 02.01.2022

## Recommended Three-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
BIOL 104		4
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ESAP 101	FYRST Seminar *	1
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4

CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
Creative & Aesthetic Inquiry (p. 29)		3
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>17</b>

### Second Year

#### Fall

Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
BIOL 250	Genetics with Lab	4
CHEM 201	Organic Chemistry I	3
CHEM 211	Organic Chemistry Laboratory I	1
Social Science Inquiry (p. 29)		3
Thematic Thread Requirement (p. 29)		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>17</b>

#### Spring

BIOL 325	Biometry with Lab	3
CHEM 202	Organic Chemistry II	3
CHEM 212	Organic Chemistry Laboratory II	1
MATH 225	Calculus I	4
or MATH 125	or Precalculus	
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>14</b>

### Third Year

#### Fall

CHEM 335	Biochemistry I	3
BIOL 340	Vertebrate Anatomy with Lab	3
or BIOL 410	or Animal Physiology with Lab	
PHYS 201	Elements of Physics I with Lab	4
or PHYS 216	or University Physics 1 with Lab	
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>13</b>

#### Spring

BIOL 330	Microbiology/Lab	3
BIOL 492	Biology Seminar	1
PHYS 202	Elements of Physics II/ Lab	4
or PHYS 217	or University Physics 2 with Lab	
Thematic Thread Requirement (p. 29)		3
Free Elective		3
<b>Hours</b>		<b>14</b>

### Fourth Year

#### Fall

Logan Chiropractic School		
<b>Hours</b>		<b>0</b>

#### Spring

Logan Chiropractic School		
<b>Hours</b>		<b>0</b>
<b>Total Hours**</b>		<b>90</b>

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject
- <sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.
- \* Students are encouraged to take ESAP 101 as a Free Elective.

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

Major Code: 6108

Concentration Code: 61LC

Revised date: 04.21.22

## Biology, Bachelor of Science (BS) - Concentration in Professional / Pre-Chiropractic (Palmer) (3+3)

### Program Learning Outcomes

- **Competence in Laboratory and Research Skills:** To conduct, assess, and communicate research investigations using established scientific practices.
- **Core Concepts for Biological Literacy:**
  - Knowledge/Content:
    - Evolution
    - Structure and function across all levels of biological organization
    - Diversity and interactions of life
    - Information flow, exchange and storage in biological systems
  - Critical Thinking/Problem Solving:
    - Connect information from cognate science courses and liberal arts courses to biological concepts
    - Apply scientific information to current and future societal problems
- **Participation in Diverse, Enriching Scientific Activities:** Apply technical and professional skills in hands-on laboratory, clinical or field experiences.
- **Professional Attitude:** Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.

### Related Links

Biology - Palmer Pre-Chiropractic Program Page (<https://www.sru.edu/academics/majors-and-minors/biology-pre-chiropractic-33/>)

Biology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/biology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Overall GPA: 3.0 or higher

Core GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	41
	Natural Science and Math College-Wide Requirements	12
	Electives	34

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the 1<sup>st</sup> year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 125	Precalculus	4
or MATH 225	Calculus I	
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16

### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
<i>Physical Sciences Inquiry</i>		
PHYS 201	Elements of Physics I with Lab	4
or PHYS 216	University Physics 1 with Lab	
Subtotal		17

### Thematic Thread

Select 12 Credits (p. 29) <sup>2</sup>		12
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<b>Total Hours</b>		<b>45</b>
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- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Students must earn a "C" or better in both Biology I with Lab (BIOL 113) and Biology II with Lab (BIOL 114) before proceeding to their next biology course.
- Students must earn a "C" or better in both Genetics with Lab (BIOL 250) and Biometry with Lab (BIOL 325) prior to graduating.
- To view the SRU policy on senior undergraduate students earning graduate credit, click here (<https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/>).

Code	Title	Hours
<b>Biology Core Requirements</b>		
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 250	Genetics with Lab <sup>1</sup>	4
BIOL 325	Biometry with Lab	3

Subtotal	15
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### Required Upper-Level Biology

BIOL 330	Microbiology/Lab	3
BIOL 340	Vertebrate Anatomy with Lab	3
or BIOL 410	Animal Physiology with Lab	
BIOL 492	Biology Seminar	1
Subtotal		7

### Required Chemistry Courses

CHEM 108	General Chemistry II <sup>2</sup>	3
CHEM 112	General Chemistry II Lab	1
CHEM 201	Organic Chemistry I	3
CHEM 202	Organic Chemistry II	3
CHEM 211	Organic Chemistry Laboratory I	1
CHEM 212	Organic Chemistry Laboratory II	1
CHEM 335	Biochemistry I	3
Subtotal		15

### Required Physics Courses

PHYS 202	Elements of Physics II/ Lab	4
or PHYS 217	University Physics 2 with Lab	

### Major Field Test

Field Test required of all Biology students before graduation		
<b>Total Hours</b>		<b>41</b>

<sup>1</sup> Core GPA

<sup>2</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
MATH 125	Precalculus	4
or MATH 225	Calculus I	
PHYS 201	Elements of Physics I with Lab	4
or PHYS 216	University Physics 1 with Lab	
<b>Total Hours</b>		<b>12</b>

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

- Volunteering
- Job Shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to

ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

BIOLOGY - BS

Palmer Chiropractic (3+3.3) (61PC)

This program is effective as of Summer 2022

Revised 04.20.2022

UCC 02.01.22

## Recommended Three-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
Creative & Aesthetic Inquiry (p. 29)		3
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>17</b>
<b>Second Year</b>		
<b>Fall</b>		
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
BIOL 250	Genetics with Lab	4
CHEM 201	Organic Chemistry I	3
CHEM 211	Organic Chemistry Laboratory I	1
Social Science Inquiry (p. 29)		3
Thematic Thread Requirement (p. 29)		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
BIOL 325	Biometry with Lab	3
CHEM 202	Organic Chemistry II	3
CHEM 212	Organic Chemistry Laboratory II	1
MATH 225	Calculus I	4
or MATH 125	or Precalculus	
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>14</b>

### Third Year

#### Fall

CHEM 335	Biochemistry I	3
BIOL 340	Vertebrate Anatomy with Lab	3
or BIOL 410	or Animal Physiology with Lab	
PHYS 201	Elements of Physics I with Lab	4
or PHYS 216	or University Physics 1 with Lab	
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>13</b>

#### Spring

BIOL 330	Microbiology/Lab	3
BIOL 492	Biology Seminar	1
PHYS 202	Elements of Physics II/ Lab	4
or PHYS 217	or University Physics 2 with Lab	
Thematic Thread Requirement (p. 29)		3
Free Elective		3
<b>Hours</b>		<b>14</b>

### Fourth Year

#### Fall

Palmer Chiropractic School		
<b>Hours</b>		<b>0</b>

#### Spring

Palmer Chiropractic School		
<b>Hours</b>		<b>0</b>
<b>Total Hours**</b>		<b>90</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6108

Concentration Code: 61PC

Revised date: 04.21.22

## Biology, Bachelor of Science (BS) - Concentration in Professional / Pre-Dental (LECOM) (4+4)

This agreement establishes an Early Acceptance Program to which Slippery Rock University undergraduate students are enrolled jointly by Slippery Rock University and by the Lake Erie College of Osteopathic Medicine (LECOM). The Early Acceptance Program is designed to facilitate the admission of Slippery Rock University students into LECOM's Doctor of Dental Medicine program. LECOM will interview the student prior to their enrollment at Slippery Rock University or within the first two years of study at Slippery Rock University. Students interviewing successfully will be offered a provisional acceptance to

LECOM's Doctor of Dental Medicine program. Upon meeting the criteria for final acceptance, they will matriculate at the LECOM Bradenton, FL campus.

For more information on admission requirements: <https://lecom.edu/admissions/entrance-requirements/early-acceptance-programs/>

## Program Learning Outcomes

- **Competence in Laboratory and Research Skills:** To conduct, assess, and communicate research investigations using established scientific practices.
- **Core Concepts for Biological Literacy:**
  - Knowledge/Content:
    - Evolution
    - Structure and function across all levels of biological organization
    - Diversity and interactions of life
    - Information flow, exchange and storage in biological systems
  - Critical Thinking/Problem Solving:
    - Connect information from cognate science courses and liberal arts courses to biological concepts
    - Apply scientific information to current and future societal problems
- **Participation in Diverse, Enriching Scientific Activities:** Apply technical and professional skills in hands-on laboratory, clinical or field experiences.
- **Professional Attitude:** Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.

## Related Links

Biology - LECOM Dental Program Page ([https://www.sru.edu/academics/majors-and-minors/biology-dental-44-\(lecom\)/](https://www.sru.edu/academics/majors-and-minors/biology-dental-44-(lecom)/))

Biology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/biology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Per Term GPA: 3.0 or higher

Overall GPA: 3.4 or higher

Science GPA: 3.2 or higher

Core GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements/Concentration	59
	Natural Science and Math College-Wide Requirements	12
	Electives	16

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 125	Precalculus	4
or MATH 225	Calculus I	
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
<i>Physical Sciences Inquiry</i>		
PHYS 201	Elements of Physics I with Lab	4
or PHYS 216	University Physics 1 with Lab	
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>45</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>



## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements/Concentration

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above
- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Students must earn a "C" or better in both Biology I with Lab (BIOL 113) and Biology II with Lab (BIOL 114) before proceeding to their next biology course.
- Students must earn a "C" or better in both Genetics with lab (BIOL 250) and Biometry with Lab (BIOL 325) prior to graduating.

Code	Title	Hours
<b>Biology Core Requirements</b>		
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 250	Genetics with Lab <sup>1,2</sup>	4
BIOL 325	Biometry with Lab	3
Subtotal		15
<b>Required Upper-Level Biology</b>		
BIOL 492	Biology Seminar <sup>1</sup>	1
Subtotal		1
<b>Upper-Level Biology Electives</b>		
Select five courses of the following:		15
BIOL 330	Microbiology/Lab <sup>1</sup>	
BIOL 335	Cell Biology/Lab <sup>1</sup>	
BIOL 340	Vertebrate Anatomy with Lab <sup>1</sup>	
BIOL 370	Molecular Biology with Lab <sup>1</sup>	
BIOL 401	Ecology with Lab <sup>1</sup>	
BIOL 410	Animal Physiology with Lab <sup>1</sup>	
BIOL 451	Plant Physiology/Lab <sup>1</sup>	
Subtotal		15
<b>Additional Upper-Level Biology Electives</b>		

Select six credits from courses not chosen above, or any 300/400 level course listed below. Additional electives may be selected from the Marine Science offerings listed below. PLE courses are only offered during the summer months through our affiliation with Pymatuning Laboratory of Ecology.

<b>Upper-Level Biology Electives (p. 322)</b>		
Subtotal		6
<b>Related Sciences – Chemistry</b>		
CHEM 108	General Chemistry II <sup>3</sup>	3
CHEM 112	General Chemistry II Lab <sup>3</sup>	1
CHEM 201	Organic Chemistry I <sup>3</sup>	3
CHEM 202	Organic Chemistry II <sup>3</sup>	3
CHEM 211	Organic Chemistry Laboratory I <sup>3</sup>	1
CHEM 212	Organic Chemistry Laboratory II <sup>3</sup>	1
Subtotal		12

<b>Related Sciences – Chemistry Advanced Elective</b>		
CHEM 301	Physical Chemistry I <sup>3</sup>	3
or CHEM 335	Biochemistry I	

<b>Related Sciences – Physics</b>		
Select one of the following:		4
PHYS 202	Elements of Physics II/ Lab	
or PHYS 217	University Physics 2 with Lab	

<b>Independent Study Option</b>		
Select one of the following options:		3

### Independent Study Option

BIOL 490	Independent Study	
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### Non-Independent Study Option

Select 3 credits in BIOL or MARS course from Additional Upper-Level Biology Electives below.

<b>Upper-Level Biology Electives (p. 322)</b>		
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### Major Field Test

Field Test required of all Biology students before graduation

<b>Total Hours</b>	<b>59</b>
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- <sup>1</sup> Course counts for 50% of Major requirements and Major GPA
  - <sup>2</sup> Core GPA
  - <sup>3</sup> Course counts for 50% of Major requirements but not for Major GPA
  - <sup>4</sup> With the exception of BIOL 300, BIOL 314, BIOL 315, BIOL 316, BIOL 319, BIOL 345
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
MATH 125	Precalculus	4
or MATH 225	Calculus I	
PHYS 201	Elements of Physics I with Lab	4
or PHYS 216	University Physics 1 with Lab	

**Additional Upper-Level Biology Electives**

Code	Title	Hours
BIOL 301	Forest Ecology <sup>1</sup>	3
BIOL 302	Ecology of Amphibians & Reptiles/Lab <sup>1</sup>	3
BIOL 303	Behavioral Ecology/Lab <sup>1</sup>	3
BIOL 305	Wetlands and Aquatic Plants/Lab <sup>1</sup>	3
BIOL 306	Freshwater Biomonitoring/Lab <sup>1</sup>	3
BIOL 307	Vertebrate Ecology/Lab <sup>1</sup>	3
BIOL 308	Aquatic Ecosystem Management / Lab <sup>1</sup>	3
BIOL 310	Plant Systematics with Lab <sup>1</sup>	3
BIOL 311	Entomology/Lab <sup>1</sup>	3
BIOL 313	Herpetology/Lab <sup>1</sup>	3
BIOL 314	Medical Parasitology with Lab <sup>1</sup>	1
BIOL 315	<sup>1</sup>	1
BIOL 316	Medical Immunology with Lab <sup>1</sup>	1
BIOL 317	Ecology and Fungi <sup>1</sup>	3
BIOL 319	Medical Virology with a Lab	1
BIOL 320	Ornithology/Lab <sup>1</sup>	3
BIOL 321	Wildlife Management/Lab <sup>1</sup>	3
BIOL 322	Conservation Biology/Lab <sup>1</sup>	3
BIOL 323	Stream Ecology/Lab <sup>1</sup>	3
BIOL 326	Field Methods in Biogeography/Lab <sup>1</sup>	3
BIOL 327	Limnology/Lab <sup>1</sup>	3
BIOL 331	Mammalogy/Lab <sup>1</sup>	3
BIOL 343	Embryology with Lab <sup>1</sup>	3
BIOL 345	<sup>1</sup>	2
BIOL 350	Evolution <sup>1</sup>	3
BIOL 356	Field Ecology / Lab <sup>1</sup>	3
BIOL 357	Environmental Microbiology with Lab <sup>1</sup>	4
BIOL 360	Field Botany <sup>1</sup>	3
BIOL 361	Flora of Western Pennsylvania <sup>1</sup>	3
BIOL 371	Vertebrate Field Zoology <sup>1</sup>	3
BIOL 373	Ichthyology/Lab <sup>1</sup>	3
BIOL 375	Ecology of Fish / Lab <sup>1</sup>	3
BIOL 402	Biogeography/Lab <sup>1</sup>	3
BIOL 405	Animal Physiological Ecology with Lab <sup>1</sup>	4
BIOL 412	Population Biology <sup>1</sup>	3
BIOL 430	Pathogenic Microbiology with Lab <sup>1</sup>	3
BIOL 450	Biology Internship <sup>1</sup>	3
BIOL 465	<sup>1</sup>	3
BIOL 470	Histology with Lab <sup>1</sup>	3
BIOL 498	Selected Topics <sup>1</sup>	3
MARS 221	Marine Invertebrates <sup>1</sup>	3
MARS 241	Marine Biology <sup>1</sup>	3
MARS 250	Wetland Ecology <sup>1</sup>	3
MARS 260	Marine Ecology <sup>1</sup>	3
MARS 270	Coastal Vegetation <sup>1</sup>	3
MARS 298	Selected Topics <sup>1</sup>	3
MARS 300	Behavior of Marine Organisms <sup>1</sup>	3
MARS 310	The Mammals of Coastal Ecosystems <sup>1</sup>	3
MARS 320	Marine Microbiology <sup>1</sup>	3
MARS 330	Tropical Invertebrates	3

MARS 342	Marine Botany <sup>1</sup>	3
MARS 343	Marine Ichthyology <sup>1</sup>	3
MARS 344	Anatomy of Marine Chordates <sup>1</sup>	3
MARS 345	Ornithology <sup>1</sup>	3
MARS 350	Physiology of Marine Invertebrates <sup>1</sup>	3
MARS 398	Selected Topics <sup>1</sup>	3
MARS 420	Marine Micropaleontology <sup>1</sup>	3
MARS 431	Ecology of Marine Plankton <sup>1</sup>	3
MARS 441	Biology of Molluscs <sup>1</sup>	3
MARS 490	Independent Study <sup>1</sup>	3
MARS 491	Coral Reef Ecology <sup>1</sup>	3
MARS 492	Marine Mammals <sup>1</sup>	3
MARS 498	Selected Topics <sup>1</sup>	3
MARS 500	Problems in Marine Science <sup>1</sup>	3

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

**Co-curricular and Experiential Learning**

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Student-faculty research
2. Internships
3. Volunteering
4. Job Shadowing

**Important Curriculum Guide Notes**

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

BIOLOGY - PROFESSIONAL - BS (6108)

LECOM DENTAL (4+4) (61LD)

This program is effective as of Summer 2022

Revised 04.04.2022

UCC 02.01.2022

**Recommended Four-Year Plan**

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3

ESAP 101	FIRST Seminar *	1
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>14</b>

**Second Year****Fall**

Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
BIOL 250	Genetics with Lab	4
CHEM 201	Organic Chemistry I	3
CHEM 211	Organic Chemistry Laboratory I	1
PSYC 105	Introduction to Psychology	3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>14</b>

**Spring**

Humanities Inquiry		3
BIOL 325	Biometry with Lab	3
CHEM 202	Organic Chemistry II	3
CHEM 212	Organic Chemistry Laboratory II	1
MATH 225	Calculus I	4
or MATH 125	or Precalculus	
<b>Hours</b>		<b>14</b>

**Third Year****Fall**

CHEM 335	Biochemistry I	3
or CHEM 301	or Physical Chemistry 1	
PHYS 201	Elements of Physics I with Lab	4
or PHYS 216	or University Physics 1 with Lab	
BIOL 300+	Upper Level BIOL Elective	3
BIOL 300+	Upper Level BIOL Elective	3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>16</b>

**Spring**

PHYS 202	Elements of Physics II/ Lab	4
or PHYS 217	or University Physics 2 with Lab	
BIOL 300+	Upper Level BIOL Elective	3
BIOL 300+	Upper Level BIOL Elective	3
Thematic Thread Requirement (p. 29)		3
Behavioral Science Course		3
<b>Hours</b>		<b>16</b>

**Fourth Year****Fall**

BIOL 300+	Upper Level BIOL Elective	3
BIOL 300+	Upper Level BIOL Elective	3
Thematic Thread Requirement (p. 29)		3

Free Elective		3
Free Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
BIOL 300+	Upper Level BIOL Elective	3
BIOL 490	Independent Study	3
BIOL 492	Biology Seminar	1
Thematic Thread Requirement (p. 29)		3
Free Elective		3
Free Elective		3
<b>Hours</b>		<b>16</b>
<b>Total Hours**</b>		<b>120</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>3</sup> or BIOL 300/400 level elective (except BIOL 300, BIOL 314, BIOL 315, BIOL 316, BIOL 319, BIOL 345)

<sup>4</sup> or BIOL 300+:Upper Level BIOL Elective

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6108

Concentration Code: 61LD

Revised date: 04.21.22

## Biology, Bachelor of Science (BS) - Concentration In Professional / Pre-Dental (WVU) (4+4)

### PROGRAM LEARNING OUTCOMES

- **Competence in Laboratory and Research Skills:** To conduct, assess, and communicate research investigations using established scientific practices.
- **Core Concepts for Biological Literacy:**
  - Knowledge/Content:
    - Evolution
    - Structure and function across all levels of biological organization
    - Diversity and interactions of life
    - Information flow, exchange and storage in biological systems
  - Critical Thinking/Problem Solving:
    - Connect information from cognate science courses and liberal arts courses to biological concepts
    - Apply scientific information to current and future societal problems
- **Participation in Diverse, Enriching Scientific Activities:** Apply technical and professional skills in hands-on laboratory, clinical or field experiences.

- **Professional Attitude:** Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.

RELATED LINKS

Biology - WVU Dental Program Page ([https://www.sru.edu/academics/majors-and-minors/biology-dental-44-\(wvu\)/](https://www.sru.edu/academics/majors-and-minors/biology-dental-44-(wvu)/))

Biology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/biology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

CURRICULUM GUIDE  
GPA REQUIREMENT

Overall GPA: 3.6 Major GPA: 2.0 Core GPA: 2.0

SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements/Concentration	59
	Natural Science and Math College-Wide Requirements	12
	Electives	16

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 225	Calculus I	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
<i>Physical Sciences Inquiry</i>		
PHYS 216	University Physics 1 with Lab	4

Subtotal	17
<b>Thematic Thread</b>	
Select 12 Credits (p. 29) <sup>2</sup>	
<hr/>	
<b>Total Hours</b>	<b>45</b>

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject
- <sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<hr/>		
<b>Total Hours</b>		<b>0-3</b>

Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<hr/>		
<b>Total Hours</b>		<b>0-3</b>

DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

MAJOR REQUIREMENTS

- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Students must earn a "C" or better in both Biology I with Lab (BIOL 113) and Biology II with Lab (BIOL 114) before proceeding to their next biology course.
- Students must earn a "C" or better in both Genetics with Lab (BIOL 250) and Biometry with Lab (BIOL 325) prior to graduating

Code	Title	Hours
<b>Biology Core Requirements</b>		
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4

BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 250	Genetics with Lab <sup>1,2</sup>	4
BIOL 325	Biometry with Lab <sup>1</sup>	3
Subtotal		15

**Required Upper-Level Biology**

BIOL 492	Biology Seminar <sup>1</sup>	1
Subtotal		1

**Upper-Level Biology Electives**

Select five courses of the following:		15
BIOL 330	Microbiology/Lab <sup>1</sup>	
BIOL 335	Cell Biology/Lab <sup>1</sup>	
BIOL 340	Vertebrate Anatomy with Lab <sup>1</sup>	
BIOL 370	Molecular Biology with Lab <sup>1</sup>	
BIOL 401	Ecology with Lab <sup>1</sup>	
BIOL 410	Animal Physiology with Lab <sup>1</sup>	
BIOL 451	Plant Physiology/Lab <sup>1</sup>	
Subtotal		15

**Additional Upper-Level Biology Electives**

Select six credits from courses not chosen above, or any 300/400 level course listed below. Additional electives may be selected from the Marine Science offerings listed below. PLE courses are only offered during the summer months through our affiliation with Pymatuning Laboratory of Ecology.		6
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Upper-Level Biology Electives (p. 325)		
Subtotal		6

**Independent Study Option**

Select one of the following options:		3
BIOL 490	Independent Study	
Upper-Level Biology Electives (p. 325)		
Subtotal		3

**Major Field Test**

Field Test required of all Biology students before graduation		
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**Related Sciences**

CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
CHEM 201	Organic Chemistry I	3
CHEM 202	Organic Chemistry II	3
CHEM 211	Organic Chemistry Laboratory I	1
CHEM 212	Organic Chemistry Laboratory II	1
CHEM 335	Biochemistry I	3
PHYS 217	University Physics 2 with Lab	4
Subtotal		19

**Total Hours** **59**

**NATURAL SCIENCE AND MATH COLLEGE-WIDE REQUIREMENTS**

Code	Title	Hours
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
MATH 225	Calculus I	4
PHYS 216	University Physics 1 with Lab	4

**Upper-Level Biology Electives**

Code	Title	Hours
BIOL 301	Forest Ecology <sup>1</sup>	3
BIOL 302	Ecology of Amphibians & Reptiles/Lab <sup>1</sup>	3
BIOL 303	Behavioral Ecology/Lab <sup>1</sup>	3
BIOL 305	Wetlands and Aquatic Plants/Lab <sup>1</sup>	3
BIOL 306	Freshwater Biomonitoring/Lab <sup>1</sup>	3
BIOL 307	Vertebrate Ecology/Lab <sup>1</sup>	3
BIOL 308	Aquatic Ecosystem Management / Lab <sup>1</sup>	3
BIOL 310	Plant Systematics with Lab <sup>1</sup>	3
BIOL 311	Entomology/Lab <sup>1</sup>	3
BIOL 313	Herpetology/Lab <sup>1</sup>	3
BIOL 314	Medical Parasitology with Lab <sup>1</sup>	1
BIOL 315	<sup>1</sup>	1
BIOL 316	Medical Immunology with Lab <sup>1</sup>	1
BIOL 317	Ecology and Fungi <sup>1</sup>	3
BIOL 319	Medical Virology with a Lab	1
BIOL 320	Ornithology/Lab <sup>1</sup>	3
BIOL 321	Wildlife Management/Lab <sup>1</sup>	3
BIOL 322	Conservation Biology/Lab <sup>1</sup>	3
BIOL 323	Stream Ecology/Lab <sup>1</sup>	3
BIOL 326	Field Methods in Biogeography/Lab <sup>1</sup>	3
BIOL 327	Limnology/Lab <sup>1</sup>	3
BIOL 331	Mammology/Lab <sup>1</sup>	3
BIOL 343	Embryology with Lab <sup>1</sup>	3
BIOL 345	<sup>1</sup>	2
BIOL 350	Evolution <sup>1</sup>	3
BIOL 356	Field Ecology / Lab <sup>1</sup>	3
BIOL 357	Environmental Microbiology with Lab <sup>1</sup>	4
BIOL 360	Field Botany <sup>1</sup>	3
BIOL 361	Flora of Western Pennsylvania <sup>1</sup>	3
BIOL 371	Vertebrate Field Zoology <sup>1</sup>	3
BIOL 373	Ichthyology/Lab <sup>1</sup>	3
BIOL 375	Ecology of Fish / Lab <sup>1</sup>	3
BIOL 402	Biogeography/Lab <sup>1</sup>	3
BIOL 405	Animal Physiological Ecology with Lab <sup>1</sup>	4
BIOL 412	Population Biology <sup>1</sup>	3
BIOL 430	Pathogenic Microbiology with Lab <sup>1</sup>	3
BIOL 450	Biology Internship <sup>1</sup>	3
BIOL 465	<sup>1</sup>	3
BIOL 470	Histology with Lab <sup>1</sup>	3
BIOL 498	Selected Topics <sup>1</sup>	3
MARS 221	Marine Invertebrates <sup>1</sup>	3
MARS 241	Marine Biology <sup>1</sup>	3

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> Core GPA

<sup>3</sup> Course counts for 50% of Major requirements but not for Major GPA

<sup>4</sup> With the exception of BIOL 300, BIOL 314, BIOL 315, BIOL 316, BIOL 319, BIOL 345

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.



MARS 250	Wetland Ecology <sup>1</sup>	3
MARS 260	Marine Ecology <sup>1</sup>	3
MARS 270	Coastal Vegetation <sup>1</sup>	3
MARS 298	Selected Topics <sup>1</sup>	3
MARS 300	Behavior of Marine Organisms <sup>1</sup>	3
MARS 310	The Mammals of Coastal Ecosystems <sup>1</sup>	3
MARS 320	Marine Microbiology <sup>1</sup>	3
MARS 330	Tropical Invertebrates	3
MARS 342	Marine Botany <sup>1</sup>	3
MARS 343	Marine Ichthyology <sup>1</sup>	3
MARS 344	Anatomy of Marine Chordates <sup>1</sup>	3
MARS 345	Ornithology <sup>1</sup>	3
MARS 350	Physiology of Marine Invertebrates <sup>1</sup>	3
MARS 398	Selected Topics <sup>1</sup>	3
MARS 420	Marine Micropaleontology <sup>1</sup>	3
MARS 431	Ecology of Marine Plankton <sup>1</sup>	3
MARS 441	Biology of Molluscs <sup>1</sup>	3
MARS 490	Independent Study <sup>1</sup>	3
MARS 491	Coral Reef Ecology <sup>1</sup>	3
MARS 492	Marine Mammals <sup>1</sup>	3
MARS 498	Selected Topics <sup>1</sup>	3
MARS 500	Problems in Marine Science <sup>1</sup>	3

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

## CO-CURRICULAR AND EXPERIENTIAL LEARNING

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Volunteering
2. Job Shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

BIOLOGY - PROFESSIONAL - BS (6108)  
West Virginia University Dental (4+4) (61WD)  
This program is effective as of Summer 2022  
Revised 04.04.2022  
UCC 02.01.2022

## RECOMMENDED FOUR-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ESAP 101	FYRST Seminar *	1
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
MATH 225	Calculus I	4
or MATH 125	or Precalculus	
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
BIOL 250	Genetics with Lab	4
CHEM 201	Organic Chemistry I	3
CHEM 211	Organic Chemistry Laboratory I	1
PHYS 201	Elements of Physics I with Lab	4
or PHYS 216	or University Physics 1 with Lab	
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
BIOL 325	Biometry with Lab	3
CHEM 202	Organic Chemistry II	3
CHEM 212	Organic Chemistry Laboratory II	1
PHYS 202	Elements of Physics II/ Lab	4
or PHYS 217	or University Physics 2 with Lab	
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>14</b>
<b>Third Year</b>		
<b>Fall</b>		
BIOL 340	Vertebrate Anatomy with Lab	3
CHEM 335	Biochemistry I	3
BIOL 300+	Upper Level BIOL Elective	3
Creative & Aesthetic Inquiry (p. 29)		3
Social Science Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
BIOL 300+	Upper Level BIOL Elective	3
BIOL 300+	Upper Level BIOL Elective	3
Thematic Thread Requirement (p. 29)		3

Thematic Thread Requirement (p. 29)	3
Free Elective	3
<b>Hours</b>	<b>15</b>
<b>Fourth Year</b>	
<b>Fall</b>	
BIOL 300+ Upper Level BIOL Elective	3
BIOL 300+ Upper Level BIOL Elective	3
Thematic Thread Requirement (p. 29)	3
Thematic Thread Requirement (p. 29)	3
Free Elective	3
<b>Hours</b>	<b>15</b>
<b>Spring</b>	
BIOL 300+ Upper Level BIOL Elective	3
BIOL 490 Independent Study <sup>4</sup>	3
BIOL 492 Biology Seminar	1
Free Elective	3
Free Elective	3
Free Elective	2
<b>Hours</b>	<b>15</b>
<b>Total Hours**</b>	<b>119</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>3</sup> or BIOL 300/400 level elective (except BIOL 300, BIOL 314, BIOL 315, BIOL 316, BIOL 319, BIOL 345)

<sup>4</sup> or BIOL 300+:Upper Level BIOL Elective

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6108

Concentration Code: 61WD

Revised date: 04.21.22

## Biology, Bachelor of Science (BS) - Concentration in Professional / Pre-Master of Education (7-12)

Students seeking state certification in secondary education must also complete requirements for a Master of Education degree, a one-year program at SRU. All of our programs are designed to steadily develop the quantitative, deductive and inductive reasoning skills that biologists must have.

All candidates completing this program and student teaching are eligible to receive Pennsylvania certification after achieving a passing or qualifying score on Pennsylvania Department of Education required exam(s). If you are interested in teaching in another state, please contact the Department of Education in that state.

## Requirements for the Certification

Teacher certification is earned through the master of education degree at Slippery Rock University. Students seeking secondary school teaching certification in biology must earn a bachelor of arts or a bachelor of science degree in biology and contact the Department of Secondary Education/Foundations of Education concerning its graduate program in education. Information about this program, including prerequisites for admission, may be obtained from the Secondary Education/Foundations of Education office in 114 McKay Education Building.

## Program Learning Outcomes

- **Competence in Laboratory and Research Skills:** To conduct, assess, and communicate research investigations using established scientific practices.
- **Core Concepts for Biological Literacy:**
  - Knowledge/Content:
    - Evolution
    - Structure and function across all levels of biological organization
    - Diversity and interactions of life
    - Information flow, exchange and storage in biological systems
  - Critical Thinking/Problem Solving:
    - Connect information from cognate science courses and liberal arts courses to biological concepts
    - Apply scientific information to current and future societal problems
- **Participation in Diverse, Enriching Scientific Activities:** Apply technical and professional skills in hands-on laboratory, clinical or field experiences.
- **Professional Attitude:** Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.

## Related Links

Biology - Pre-Masters of Education, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/biology-pre-masters-of-education/>)

Biology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/biology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

Core GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements/Concentration	59

Natural Science and Math College-Wide Requirements	12
Electives	16

\* All undergraduate degree programs require a minimum of 120 credits.  
Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 125	Precalculus	4
or MATH 225	Calculus I	
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
<i>Physical Sciences Inquiry</i>		
PHYS 201	Elements of Physics I with Lab	4
or PHYS 211	General Physics I with Lab	
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>45</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		

ESAP 110	Beginning Algebra
<hr/>	
<b>Total Hours</b>	<b>0-3</b>

Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

Major Requirements/Concentration

- 30 major credits must be taken at SRU or PASSHE
- 28 major credits must be taken at the 300 level or above
- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Students should complete all 200-level Biology requirements by the end of their sophomore year.
- To view the SRU policy on senior undergraduate students earning graduate credit, click here (<https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/>).

Code	Title	Hours
<b>Biology Core Requirements</b>		
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 250	Genetics with Lab <sup>1,2</sup>	4
BIOL 325	Biometry with Lab	3
Subtotal		15
<b>Required Upper-Level Biology</b>		
BIOL 492	Biology Seminar <sup>1</sup>	1
Subtotal		1
<b>Upper-Level Biology Electives</b>		
Select five courses of the following:		15
BIOL 330	Microbiology/Lab <sup>1</sup>	
BIOL 335	Cell Biology/Lab <sup>1</sup>	
BIOL 340	Vertebrate Anatomy with Lab <sup>1</sup>	
BIOL 370	Molecular Biology with Lab <sup>1</sup>	
BIOL 401	Ecology with Lab <sup>1</sup>	
BIOL 410	Animal Physiology with Lab <sup>1</sup>	
BIOL 451	Plant Physiology/Lab <sup>1</sup>	
Subtotal		15

**Additional Upper-Level Biology Electives**

Select 6 credits which can come from courses not chosen above, or any 300/400 level course listed below. Additional electives may be selected from the Marine Science offerings listed below. PLE courses are only offered during the summer months through our affiliation with Pymatuning Laboratory of Ecology.

Upper-Level Biology Electives (p. 329)	
Subtotal	6

**Related Sciences – Chemistry**

CHEM 108	General Chemistry II <sup>3</sup>	3
CHEM 112	General Chemistry II Lab <sup>3</sup>	1
CHEM 201	Organic Chemistry I <sup>3</sup>	3
CHEM 202	Organic Chemistry II <sup>3</sup>	3
CHEM 211	Organic Chemistry Laboratory I <sup>3</sup>	1
CHEM 212	Organic Chemistry Laboratory II <sup>3</sup>	1
Subtotal		12

**Related Sciences – Chemistry Advanced Elective**

Select one of the following:		3
CHEM 301	Physical Chemistry I <sup>3</sup>	
CHEM 335	Biochemistry I <sup>3</sup>	
Subtotal		3

**Related Sciences – Physics**

Select one of the following:		
PHYS 202	Elements of Physics II/ Lab	4
or PHYS 217	University Physics 2 with Lab	
Subtotal		4

**Independent Study Options**

Select one of the following options:		3
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*Independent Study Option*

BIOL 490	Independent Study	
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*Non-Independent Study Option*

Select 3 credits in BIOL or MARS course from Additional Upper-Level Biology Electives below.

Upper-Level Biology Electives (p. 329)	
Subtotal	3

**Major Field Test**

Field Test required of all Biology students before graduation

<b>Total Hours</b>	<b>59</b>
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- <sup>1</sup> Course counts for 50% of Major requirements and Major GPA
- <sup>2</sup> Core GPA
- <sup>3</sup> Course counts for 50% of Major requirements but not for Major GPA
- <sup>4</sup> With the exception of BIOL 300, BIOL 314, BIOL 315, BIOL 316, BIOL 319, BIOL 345
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**Recommended Courses for Biology Pre-Masters in Education Majors**

Listed below are the recommended courses for Biology Pre-Masters in Education majors. You will need to take these courses prior to obtaining your M. Ed.

Code	Title	Hours
SEFE 338	Standards-Based Instruction & Assessment in the Inclusionary Classroom	3
SPED 121	Overview of Special Education	3
One EGEO with Lab		4
Two Math courses (one must be Calculus)		6-8
Must take the following as part of your Upper-Class Biology Electives:		
BIOL 370	Molecular Biology with Lab	
BIOL 401	Ecology with Lab	
BIOL 410	Animal Physiology with Lab	

**Natural Science and Math College-Wide Requirements**

Code	Title	Hours
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
MATH 125	Precalculus	4
or MATH 225	Calculus I	
PHYS 201	Elements of Physics I with Lab	4
or PHYS 211	General Physics I with Lab	

**Additional Upper-Level Biology Electives**

Code	Title	Hours
BIOL 301	Forest Ecology <sup>1</sup>	3
BIOL 302	Ecology of Amphibians & Reptiles/Lab <sup>1</sup>	3
BIOL 303	Behavioral Ecology/Lab <sup>1</sup>	3
BIOL 305	Wetlands and Aquatic Plants/Lab <sup>1</sup>	3
BIOL 306	Freshwater Biomonitoring/Lab <sup>1</sup>	3
BIOL 307	Vertebrate Ecology/Lab <sup>1</sup>	3
BIOL 308	Aquatic Ecosystem Management / Lab <sup>1</sup>	3
BIOL 310	Plant Systematics with Lab <sup>1</sup>	3
BIOL 311	Entomology/Lab <sup>1</sup>	3
BIOL 313	Herpetology/Lab <sup>1</sup>	3
BIOL 314	Medical Parasitology with Lab <sup>1</sup>	1
BIOL 315	<sup>1</sup>	1
BIOL 316	Medical Immunology with Lab <sup>1</sup>	1
BIOL 317	Ecology and Fungi <sup>1</sup>	3
BIOL 319	Medical Virology with a Lab	1
BIOL 320	Ornithology/Lab <sup>1</sup>	3
BIOL 321	Wildlife Management/Lab <sup>1</sup>	3
BIOL 322	Conservation Biology/Lab <sup>1</sup>	3
BIOL 323	Stream Ecology/Lab <sup>1</sup>	3
BIOL 326	Field Methods in Biogeography/Lab <sup>1</sup>	3
BIOL 327	Limnology/Lab <sup>1</sup>	3
BIOL 331	Mammology/Lab <sup>1</sup>	3
BIOL 343	Embryology with Lab <sup>1</sup>	3
BIOL 345	<sup>1</sup>	2
BIOL 350	Evolution <sup>1</sup>	3
BIOL 356	Field Ecology / Lab <sup>1</sup>	3
BIOL 357	Environmental Microbiology with Lab <sup>1</sup>	4
BIOL 360	Field Botany <sup>1</sup>	3
BIOL 361	Flora of Western Pennsylvania <sup>1</sup>	3
BIOL 371	Vertebrate Field Zoology <sup>1</sup>	3

BIOL 373	Ichthyology/Lab <sup>1</sup>	3
BIOL 375	Ecology of Fish / Lab <sup>1</sup>	3
BIOL 400	Disease Ecology <sup>1</sup>	3
BIOL 402	Biogeography/Lab <sup>1</sup>	3
BIOL 405	Animal Physiological Ecology with Lab <sup>1</sup>	4
BIOL 412	Population Biology <sup>1</sup>	3
BIOL 430	Pathogenic Microbiology with Lab <sup>1</sup>	3
BIOL 450	Biology Internship <sup>1</sup>	3
BIOL 465	<sup>1</sup>	3
BIOL 470	Histology with Lab <sup>1</sup>	3
BIOL 498	Selected Topics <sup>1</sup>	3
MARS 221	Marine Invertebrates <sup>1</sup>	3
MARS 241	Marine Biology <sup>1</sup>	3
MARS 250	Wetland Ecology	3
MARS 260	Marine Ecology	3
MARS 270	Coastal Vegetation	3
MARS 298	Selected Topics	1-3
MARS 300	Behavior of Marine Organisms <sup>1</sup>	3
MARS 310	The Mammals of Coastal Ecosystems <sup>1</sup>	3
MARS 320	Marine Microbiology <sup>1</sup>	3
MARS 330	Tropical Invertebrates	3
MARS 342	Marine Botany <sup>1</sup>	3
MARS 343	Marine Ichthyology <sup>1</sup>	3
MARS 344	Anatomy of Marine Chordates <sup>1</sup>	3
MARS 345	Ornithology <sup>1</sup>	3
MARS 350	Physiology of Marine Invertebrates <sup>1</sup>	3
MARS 398	Selected Topics <sup>1</sup>	3
MARS 420	Marine Micropaleontology <sup>1</sup>	3
MARS 431	Ecology of Marine Plankton <sup>1</sup>	3
MARS 441	Biology of Molluscs <sup>1</sup>	3
MARS 490	Independent Study <sup>1</sup>	3
MARS 491	Coral Reef Ecology <sup>1</sup>	3
MARS 492	Marine Mammals <sup>1</sup>	3
MARS 498	Selected Topics <sup>1</sup>	3
MARS 500	Problems in Marine Science <sup>1</sup>	3

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Student-faculty research
2. Internships
3. Volunteering
4. Job Shadowing

BIOLOGY - BS (6108)

w/optional Pre Masters in Education (7-12) (PX)

This program is effective as of Fall 2019.

Revised 12.14.2020

UCC 2.5.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
ENGL 102	Critical Writing	3
ESAP 101	FIRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>14</b>
<b>Second Year</b>		
<b>Fall</b>		
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
BIOL 250	Genetics with Lab	4
CHEM 201	Organic Chemistry I	3
CHEM 211	Organic Chemistry Laboratory I	1
Humanities Inquiry (p. 29)		3
Social Science Inquiry (p. 29)		3
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
BIOL 325	Biometry with Lab	3
CHEM 202	Organic Chemistry II	3
CHEM 212	Organic Chemistry Laboratory II	1
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>13</b>



**Third Year****Fall**

CHEM 335 or CHEM 301	Biochemistry I or Physical Chemistry 1	3
BIOL 370	Molecular Biology with Lab ((recommended 300+ Upper Level Biology elective))	3
BIOL 401	Ecology with Lab ((recommended 300+ Upper Level Biology elective))	3
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>

**Spring**

MATH 225 or MATH 125	Calculus I or Precalculus	4
BIOL 300+	Upper Level BIOL Elective	3
BIOL 300+	Upper Level BIOL Elective	3
SPED 121	Overview of Special Education (Recommended Elective)	3
EGEO/Lab (Recommended Elective)		2
<b>Hours</b>		<b>15</b>

**Fourth Year****Fall**

PHYS 201 or PHYS 211	Elements of Physics I with Lab or General Physics I with Lab	4
BIOL 410	Animal Physiology with Lab (recommended 300+ Upper Level Biology elective )	3
BIOL 300+	Upper Level BIOL Elective	3
SEFE 338	Standards-Based Instruction & Assessment in the Inclusionary Classroom (Recommended Elective)	3
Free Elective		3
<b>Hours</b>		<b>16</b>

**Spring**

2nd Math Class		3
PHYS 202 or PHYS 217	Elements of Physics II/ Lab or University Physics 2 with Lab	4
BIOL 300+	Upper Level BIOL Elective	3
BIOL 490	Independent Study <sup>3</sup>	3
BIOL 492	Biology Seminar	1
Free Elective		3
<b>Hours</b>		<b>17</b>
<b>Total Hours**</b>		<b>122</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> or BIOL 300/400 level (Except BIOL 300, BIOL 314, BIOL 315, BIOL 316, BIOL 319, BIOL 345)

<sup>3</sup> or BIOL 300+:Upper Level BIOL Elective

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to**

registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6108

Concentration Code: PX

Revised date: 04.21.22

## Biology, Bachelor of Science (BS) - Concentration in Professional / Pre-Osteopathy (LECOM) (3+4)

Under this joint agreement between Lake Erie College of Osteopathic Medicine (LECOM) and Slippery Rock University (SRU), select undergraduate students who have successfully completed specific course work at SRU may continue their education in osteopathic medicine at LECOM. For this program, students complete three years of undergraduate education at SRU and then complete their four years of medical school education at LECOM and its associated clinical sites.

Slippery Rock University will confer the Bachelor of Science degree in Biology to Slippery Rock students who have successfully completed the Slippery Rock courses at SRU and the first four semesters (pre-clinical) of LECOM's Academic curriculum.

For more information on admission requirements: <https://lecom.edu/admissions/entrance-requirements/early-acceptance-programs/>

## Program Learning Outcomes

- **Competence in Laboratory and Research Skills:** To conduct, assess, and communicate research investigations using established scientific practices.
- **Core Concepts for Biological Literacy:**
  - Knowledge/Content:
    - Evolution
    - Structure and function across all levels of biological organization
    - Diversity and interactions of life
    - Information flow, exchange and storage in biological systems
  - Critical Thinking/Problem Solving:
    - Connect information from cognate science courses and liberal arts courses to biological concepts
    - Apply scientific information to current and future societal problems
- **Participation in Diverse, Enriching Scientific Activities:** Apply technical and professional skills in hands-on laboratory, clinical or field experiences.
- **Professional Attitude:** Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.

## Related Links

Biology - LECOM Pre-Osteopathy 3+4, BS Program Page ([https://www.sru.edu/academics/majors-and-minors/biology-pre-osteopath-34-\(lecom\)/](https://www.sru.edu/academics/majors-and-minors/biology-pre-osteopath-34-(lecom)/))

Biology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/biology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Overall GPA: 3.4 or higher  
Science GPA: 3.2 or higher  
Core GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	43
	Natural Science and Math College-Wide Requirements	12
	Electives	20

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the 1<sup>st</sup> year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 125	Precalculus	4
or MATH 225	Calculus I	
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
<i>Physical Sciences Inquiry</i>		
PHYS 201	Elements of Physics I with Lab	4
or PHYS 216	University Physics 1 with Lab	
Subtotal		17
<b>Thematic Thread</b>		

Select 12 Credits (p. 29) <sup>2</sup>	12
<b>Total Hours</b>	<b>45</b>

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject
- <sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

### Major Requirements

- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Students must earn a "C" or better in both Biology I with Lab (BIOL 113) and Biology II with Lab (BIOL 114) before proceeding to their next biology course.
- Students must earn a "C" or better in both Genetics with Lab (BIOL 250) and Biometry with Lab (BIOL 325) prior to graduating.
- To view the SRU policy on senior undergraduate students earning graduate credit, click here (<https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/>).

Code	Title	Hours
<b>Biology Core Requirements</b>		
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 250	Genetics with Lab <sup>1</sup>	4
BIOL 325	Biometry with Lab	3
Subtotal		15
<b>Required Upper-Level Biology</b>		
BIOL 330	Microbiology/Lab	3
BIOL 340	Vertebrate Anatomy with Lab	3
BIOL 410	Animal Physiology with Lab	3
Subtotal		9
<b>Required Chemistry Courses</b>		
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
CHEM 201	Organic Chemistry I	3
CHEM 202	Organic Chemistry II	3
CHEM 211	Organic Chemistry Laboratory I	1
CHEM 212	Organic Chemistry Laboratory II	1
CHEM 335	Biochemistry I	3
Subtotal		15
<b>Required Physics Course</b>		
PHYS 202 or PHYS 217	Elements of Physics II/ Lab University Physics 2 with Lab	4
<b>Major Field Test</b>		
Field Test required of all Biology students before graduation		
<b>Total Hours</b>		<b>43</b>

<sup>1</sup> Core GPA

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
MATH 125 or MATH 225	Precalculus Calculus I	4
PHYS 201 or PHYS 216	Elements of Physics I with Lab University Physics 1 with Lab	4

## Additional LECOM Osteopathic Prerequisites

Code	Title	Hours
Select two of the following:		
INDP 201	Principles of Sociology	
INDP 202	Introduction to Anthropology	
PHIL 101	Introduction to Philosophy	
PHIL 325	Medical/Health Care Ethics	
PSYC XXX	Any PSYC Course	

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student

success and participation in the following types of programs and activities:

1. Volunteering
2. Job Shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

BIOLOGY - PROFESSIONAL - BS (6108)

LECOM Pre-Osteopath (3+4) (61LE)

This program is effective as of Summer 2022

Revised 04.20.2022

UCC 02.01.2022

## Recommended Three-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
ESAP 101	FIRST Seminar *	1
MATH 225 or MATH 125	Calculus I or Precalculus	4
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
ENGL 104	Critical Reading	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>17</b>
<b>Second Year</b>		
<b>Fall</b>		
BIOL 250	Genetics with Lab	4
CHEM 201	Organic Chemistry I	3
CHEM 211	Organic Chemistry Laboratory I	1
PSYC 105	Introduction to Psychology (Recommended for Social Science Inquiry Requirement)	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	

POLS 235	Civil Discourse and Democracy	
Humanities Inquiry (p. 29)		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
Behavioral Science		3
BIOL 325	Biometry with Lab	3
CHEM 202	Organic Chemistry II	3
CHEM 212	Organic Chemistry Laboratory II	1
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>13</b>
<b>Third Year</b>		
<b>Fall</b>		
CHEM 335	Biochemistry I	3
BIOL 340	Vertebrate Anatomy with Lab	3
BIOL 410	Animal Physiology with Lab	3
PHYS 201 or PHYS 216	Elements of Physics I with Lab or University Physics 1 with Lab	4
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
BIOL 330	Microbiology/Lab	3
PHYS 202 or PHYS 217	Elements of Physics II/ Lab or University Physics 2 with Lab	4
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
Free Elective		3
<b>Hours</b>		<b>16</b>
<b>Fourth Year</b>		
<b>Fall</b>		
LECOM Osteopathic School		
<b>Hours</b>		<b>0</b>
<b>Spring</b>		
LECOM Osteopathic School		
<b>Hours</b>		<b>0</b>
<b>Total Hours**</b>		<b>95</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6108

Concentration Code: 61LE

Revised date: 04.21.22

## Biology, Bachelor of Science (BS) - Concentration in Professional / Pre-Osteopathy (LECOM) (4+4)

This agreement establishes an Early Acceptance Program to which Slippery Rock University undergraduate students are enrolled jointly by Slippery Rock University and by the Lake Erie College of Osteopathic Medicine (LECOM). The Early Acceptance Program is designed to facilitate the admission of Slippery Rock University students into LECOM's Doctor of Osteopathic Medicine program. LECOM will interview the student prior to their enrollment at Slippery Rock University or within the first two years of study at Slippery Rock University. Students interviewing successfully will be offered a provisional acceptance to LECOM's Doctor of Osteopathic Medicine program. Upon meeting the criteria for final acceptance, they will enter LECOM.

For more information on admission requirements: <https://lecom.edu/admissions/entrance-requirements/early-acceptance-programs/>

## Program Learning Outcomes

- **Competence in Laboratory and Research Skills:** To conduct, assess, and communicate research investigations using established scientific practices.
- **Core Concepts for Biological Literacy:**
  - Knowledge/Content:
    - Evolution
    - Structure and function across all levels of biological organization
    - Diversity and interactions of life
    - Information flow, exchange and storage in biological systems
  - Critical Thinking/Problem Solving:
    - Connect information from cognate science courses and liberal arts courses to biological concepts
    - Apply scientific information to current and future societal problems
- **Participation in Diverse, Enriching Scientific Activities:** Apply technical and professional skills in hands-on laboratory, clinical or field experiences.
- **Professional Attitude:** Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.

## Related Links

Biology - LECOM Pre-Osteopathy 4+4, BS Program Page ([https://www.sru.edu/academics/majors-and-minors/biology-pre-osteopathic-44-\(lecom\)/](https://www.sru.edu/academics/majors-and-minors/biology-pre-osteopathic-44-(lecom)/))

Biology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/biology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement - Biology

Overall GPA: 3.4 or higher

Science GPA: 3.2 or higher

Core GPA: 2.0 or higher

## Summary\*

Code	Title	Hours
Rock Studies 2 Requirements		45
Other Basic Requirements		0-3
Computer Competency		0-3
Major/Concentration Requirements		59
Natural Science and Math College-Wide Requirements		12
Electives		16

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 125 or MATH 225	Precalculus Calculus I	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
<i>Physical Sciences Inquiry</i>		
PHYS 201 or PHYS 216	Elements of Physics I with Lab University Physics 1 with Lab	4
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>45</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements/Concentration

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above
- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Students must earn a "C" or better in both Biology I with Lab (BIOL 113) and Biology II with Lab (BIOL 114) before proceeding to their next biology course.
- Students must earn a "C" or better in both Genetics with Lab (BIOL 250) and Biometry with Lab (BIOL 325) prior to graduating.
- To view the SRU policy on senior undergraduate students earning graduate credit, click here (<https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/>).

Code	Title	Hours
<b>Biology Core Requirements</b>		
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 250	Genetics with Lab <sup>1,2</sup>	4
BIOL 325	Biometry with Lab	3
Subtotal		15
<b>Required Upper-Level Biology</b>		
BIOL 492	Biology Seminar <sup>1</sup>	1
Subtotal		1



**Upper-Level Biology Electives**

Select five courses of the following: 15

BIOL 330	Microbiology/Lab <sup>1</sup>
BIOL 335	Cell Biology/Lab <sup>1</sup>
BIOL 340	Vertebrate Anatomy with Lab <sup>1</sup>
BIOL 370	Molecular Biology with Lab <sup>1</sup>
BIOL 401	Ecology with Lab <sup>1</sup>
BIOL 410	Animal Physiology with Lab <sup>1</sup>
BIOL 451	Plant Physiology/Lab <sup>1</sup>

Subtotal 15

**Additional Upper-Level Biology Electives**

Select six credits from courses not chosen above, or any 300/400 level course listed below. Additional electives may be selected from the Marine Science offerings listed below. PLE courses are only offered during the summer months through our affiliation with Pymatuning Laboratory of Ecology.

Upper-Level Biology Electives (p. 336)	
Subtotal	6

**Related Sciences – Chemistry**

CHEM 108	General Chemistry II <sup>3</sup>	3
CHEM 112	General Chemistry II Lab <sup>3</sup>	1
CHEM 201	Organic Chemistry I <sup>3</sup>	3
CHEM 202	Organic Chemistry II <sup>3</sup>	3
CHEM 211	Organic Chemistry Laboratory I <sup>3</sup>	1
CHEM 212	Organic Chemistry Laboratory II <sup>3</sup>	1
Subtotal		12

**Related Sciences – Chemistry Advanced Elective**

Select one of the following: 3

CHEM 301	Physical Chemistry I <sup>3</sup>
CHEM 335	Biochemistry I <sup>3</sup>

**Related Sciences – Physics**

PHYS 202	Elements of Physics II/ Lab	4
or PHYS 217	University Physics 2 with Lab	
Any 300/400 level BIOL elective <sup>4</sup>		

**Independent Study Option**

Select one of the following options: 3

*Independent Study Option*

BIOL 490	Independent Study
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*Non-Independent Study Option*

Select 3 credits in BIOL or MARS course from Additional Upper-Level Biology Electives below.

Upper-Level Biology Electives (p. 336)	
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**Major Field Test**

Field Test required of all Biology students before graduation

**Total Hours** 59

- <sup>1</sup> Course counts for 50% of Major requirements and Major GPA  
<sup>2</sup> Core GPA  
<sup>3</sup> Course counts for 50% of Major requirements but not for Major GPA  
<sup>4</sup> With the exception of BIOL 300, BIOL 314, BIOL 315, BIOL 316, BIOL 319, BIOL 345

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**Natural Science and Math College-Wide Requirements**

Code	Title	Hours
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
MATH 125	Precalculus	4
or MATH 225	Calculus I	
PHYS 201	Elements of Physics I with Lab	4
or PHYS 216	University Physics 1 with Lab	

**Additional LECOM Osteopathic Requirements**

Code	Title	Hours
Select two of the following:		
INDP 201	Principles of Sociology	
INDP 202	Introduction to Anthropology	
PHIL 101	Introduction to Philosophy	
PHIL 325	Medical/Health Care Ethics	
PSYC XXX	Any PSYC Course	

**Additional Upper-Level Biology Electives**

Code	Title	Hours
BIOL 301	Forest Ecology <sup>1</sup>	3
BIOL 302	Ecology of Amphibians & Reptiles/Lab <sup>1</sup>	3
BIOL 303	Behavioral Ecology/Lab <sup>1</sup>	3
BIOL 305	Wetlands and Aquatic Plants/Lab <sup>1</sup>	3
BIOL 306	Freshwater Biomonitoring/Lab <sup>1</sup>	3
BIOL 307	Vertebrate Ecology/Lab <sup>1</sup>	3
BIOL 308	Aquatic Ecosystem Management / Lab <sup>1</sup>	3
BIOL 310	Plant Systematics with Lab <sup>1</sup>	3
BIOL 311	Entomology/Lab <sup>1</sup>	3
BIOL 313	Herpetology/Lab <sup>1</sup>	3
BIOL 314	Medical Parasitology with Lab <sup>1</sup>	1
BIOL 315	<sup>1</sup>	1
BIOL 316	Medical Immunology with Lab <sup>1</sup>	1
BIOL 317	Ecology and Fungi <sup>1</sup>	3
BIOL 319	Medical Virology with a Lab	1
BIOL 320	Ornithology/Lab <sup>1</sup>	3
BIOL 321	Wildlife Management/Lab <sup>1</sup>	3
BIOL 322	Conservation Biology/Lab <sup>1</sup>	3
BIOL 323	Stream Ecology/Lab <sup>1</sup>	3
BIOL 326	Field Methods in Biogeography/Lab <sup>1</sup>	3
BIOL 327	Limnology/Lab <sup>1</sup>	3
BIOL 331	Mammology/Lab <sup>1</sup>	3
BIOL 343	Embryology with Lab <sup>1</sup>	3
BIOL 345	<sup>1</sup>	2
BIOL 350	Evolution <sup>1</sup>	3
BIOL 356	Field Ecology / Lab <sup>1</sup>	3
BIOL 357	Environmental Microbiology with Lab <sup>1</sup>	4
BIOL 360	Field Botany <sup>1</sup>	3
BIOL 361	Flora of Western Pennsylvania <sup>1</sup>	3

BIOL 371	Vertebrate Field Zoology <sup>1</sup>	3
BIOL 373	Ichthyology/Lab <sup>1</sup>	3
BIOL 375	Ecology of Fish / Lab <sup>1</sup>	3
BIOL 402	Biogeography/Lab <sup>1</sup>	3
BIOL 405	Animal Physiological Ecology with Lab <sup>1</sup>	4
BIOL 412	Population Biology <sup>1</sup>	3
BIOL 430	Pathogenic Microbiology with Lab <sup>1</sup>	3
BIOL 450	Biology Internship <sup>1</sup>	3
BIOL 465	<sup>1</sup>	3
BIOL 470	Histology with Lab <sup>1</sup>	3
BIOL 498	Selected Topics <sup>1</sup>	3
MARS 221	Marine Invertebrates <sup>1</sup>	3
MARS 241	Marine Biology <sup>1</sup>	3
MARS 250	Wetland Ecology <sup>1</sup>	3
MARS 260	Marine Ecology <sup>1</sup>	3
MARS 270	Coastal Vegetation <sup>1</sup>	3
MARS 298	Selected Topics <sup>1</sup>	3
MARS 300	Behavior of Marine Organisms <sup>1</sup>	3
MARS 310	The Mammals of Coastal Ecosystems <sup>1</sup>	3
MARS 320	Marine Microbiology <sup>1</sup>	3
MARS 330	Tropical Invertebrates	3
MARS 342	Marine Botany <sup>1</sup>	3
MARS 343	Marine Ichthyology <sup>1</sup>	3
MARS 344	Anatomy of Marine Chordates <sup>1</sup>	3
MARS 345	Ornithology <sup>1</sup>	3
MARS 350	Physiology of Marine Invertebrates <sup>1</sup>	3
MARS 398	Selected Topics <sup>1</sup>	3
MARS 420	Marine Micropaleontology <sup>1</sup>	3
MARS 431	Ecology of Marine Plankton <sup>1</sup>	3
MARS 441	Biology of Molluscs <sup>1</sup>	3
MARS 490	Independent Study <sup>1</sup>	3
MARS 491	Coral Reef Ecology <sup>1</sup>	3
MARS 492	Marine Mammals <sup>1</sup>	3
MARS 498	Selected Topics <sup>1</sup>	3
MARS 500	Problems in Marine Science <sup>1</sup>	3

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

## Co-Curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Student-faculty research
2. Internships
3. Volunteering
4. Job Shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report

and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

BIOLOGY - PROFESSIONAL - BS (6108)

LECOM OSTEOPATHIC (4+4) (61LO)

This program is effective as of Summer 2022

Revised 04.20.2022

UCC 02.01.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
BIOL 104		4
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>15</b>

<b>Spring</b>		
ENGL 104	Critical Reading	3
Select one 200-level Core Course:		4
BIOL 201	General Botany with Lab	
BIOL 212	General Zoology with Lab	
BIOL 250	Genetics with Lab	
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>14</b>

<b>Second Year</b>		
<b>Fall</b>		
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Select one 200-level Core Course:		4
BIOL 201	General Botany with Lab	
BIOL 212	General Zoology with Lab	
BIOL 250	Genetics with Lab	
CHEM 201	Organic Chemistry I	3
CHEM 211	Organic Chemistry Laboratory I	1
PSYC 105	Introduction to Psychology (Recommended for Social Science Inquiry Requirement)	3
Declare a Thematic Thread <sup>2</sup>		

<b>Hours</b>		<b>14</b>
<b>Spring</b>		
Humanities Inquiry (p. 29)		3
Select one 200-level Core Course:		4
BIOL 201	General Botany with Lab	

BIOL 212	General Zoology with Lab	
BIOL 250	Genetics with Lab	
CHEM 202	Organic Chemistry II	3
CHEM 212	Organic Chemistry Laboratory II	1
MATH 225	Calculus I	4
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
CHEM 335 or CHEM 301	Biochemistry I or Physical Chemistry 1	3
PHYS 211	General Physics I with Lab	4
BIOL 300+	Upper Level BIOL Elective	3
BIOL 300+	Upper Level BIOL Elective	3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
PHYS 213	General Physics III/ Lab <sup>3</sup>	4
BIOL 300+	Upper Level BIOL Elective	3
BIOL 300+	Upper Level BIOL Elective	3
Thematic Thread Requirement (p. 29)		3
Behavioral Science Course		3
<b>Hours</b>		<b>16</b>
<b>Fourth Year</b>		
<b>Fall</b>		
BIOL 300+	Upper Level BIOL Elective	3
BIOL 300+	Upper Level BIOL Elective	3
Thematic Thread Requirement (p. 29)		3
Free Elective		3
Free Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
BIOL 300+	Upper Level BIOL Elective	3
BIOL 490	Independent Study <sup>4</sup>	3
BIOL 492	Biology Seminar	1
Thematic Thread Requirement (p. 29)		3
Free Elective		3
Free Elective		2
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>120</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>3</sup> Any BIOL 300/400 Level (Except BIOL 300, BIOL 314, BIOL 315, BIOL 216, BIOL 345)

<sup>4</sup> or BIOL 300+:Upper Level BIOL Elective

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to**

registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6018

Concentration Code: 61LO

Revised date: 04.21.22

## Biology, Bachelor of Science (BS) - Concentration in Professional / Pre-Physical Therapy (SRU) (3+3)

### Biology Program Learning Outcomes

- **Competence in Laboratory and Research Skills:** To conduct, assess, and communicate research investigations using established scientific practices.
- **Core Concepts for Biological Literacy:**
  - Knowledge/Content:
    - Evolution
    - Structure and function across all levels of biological organization
    - Diversity and interactions of life
    - Information flow, exchange and storage in biological systems
  - Critical Thinking/Problem Solving:
    - Connect information from cognate science courses and liberal arts courses to biological concepts
    - Apply scientific information to current and future societal problems
- **Participation in Diverse, Enriching Scientific Activities:** Apply technical and professional skills in hands-on laboratory, clinical or field experiences.
- **Professional Attitude:** Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.

### What are your options?

**Pre-Physical Therapy SRU 3+3:** Earn a Doctor of Physical Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU DPT program. During your third undergraduate year, you apply for admission into the SRU DPT program. If accepted, your first year in the SRU DPT program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Physical Therapy (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU DPT program and apply to the SRU DPT program in your senior year.

### Related Links

Biology - Pre-Physical Therapy, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/biology-pre-physical-therapy/>)

Biology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/biology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

# Curriculum Guide

## GPA Requirement

### 1st Major: Biology

- Overall GPA: 2.00 or higher
- Major GPA (only includes Biology courses): 2.00 or higher

### 2nd Major: Pre-PT SRU 3+3 Biology

- Overall GPA: 3.00 or higher

## Summary\*

Code	Title	Hours
Rock Studies 2 Requirements		45
Other Basic Requirements		0-3
Computer Competency		0-3
Major Requirements		43
Natural Science and Math College-Wide Requirements		12
Electives		32

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the 1<sup>st</sup> year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 125	Precalculus	4
or MATH 225	Calculus I	
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16

### Integrated Inquiry

#### *Creative and Aesthetic Inquiry*

Select 3 Credits (p. 29) 3

#### *Humanities Inquiry*

Select 3 Credits (p. 29) 3

#### *Social Science Inquiry*

Select 3 Credits (p. 29) 3

#### *Natural Sciences Inquiry*

CHEM 107 General Chemistry I 3

CHEM 111 General Chemistry I Lab 1

#### *Physical Sciences Inquiry*

PHYS 201 Elements of Physics I with Lab 4

or PHYS 216 University Physics 1 with Lab

Subtotal 17

### Thematic Thread

Select 12 Credits (p. 29) <sup>2</sup> 12

**Total Hours** 45

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	

**Total Hours** 0-3

## Computer Competency

**Code** **Title** **Hours**  
Demonstrate "computer competency" by one of the following: 0-3

Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	

**Total Hours** 0-3

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Students must earn a "C" or better in both Biology I with Lab (BIOL 113 and Biology II with Lab (BIOL 114) before proceeding to their next biology course.
- Students must earn a "C" or better in both Genetics with Lab (BIOL 250) and Biometry with Lab (BIOL 325) prior to graduating.
- If you choose to pursue Pre-Physical Therapy SRU 3+3 Biology and are not accepted into the DPT program, then additional coursework is required to complete a first major of Biology-Professional. Please refer to the Biology-Professional Curriculum Guide.
- To view the SRU policy on senior undergraduate students earning graduate credit, click here (<https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/>).

Code	Title	Hours
<b>Biology Core Requirements</b>		
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 250	Genetics with Lab <sup>1</sup>	4
BIOL 325	Biometry with Lab	3
Subtotal		15
<b>Required Upper-Level Biology</b>		
BIOL 330	Microbiology/Lab	3
BIOL 340	Vertebrate Anatomy with Lab	3
BIOL 410	Animal Physiology with Lab	3
Subtotal		9
<b>Related Sciences – Chemistry</b>		
CHEM 201	Organic Chemistry I	3
CHEM 202	Organic Chemistry II	3
CHEM 211	Organic Chemistry Laboratory I	1
CHEM 212	Organic Chemistry Laboratory II	1
CHEM 335	Biochemistry I	3
Subtotal		11
<b>SRU DPT Program Requirements</b>		
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
PHYS 202 or PHYS 217	Elements of Physics II/ Lab University Physics 2 with Lab	4
Subtotal		8
<b>Major Field Test</b>		
Field Test required of all Biology students before graduation		
<b>Total Hours</b>		<b>43</b>

<sup>1</sup> Core GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
MATH 125 or MATH 225	Precalculus Calculus I	4
PHYS 201 or PHYS 216	Elements of Physics I with Lab University Physics 1 with Lab	4

## Additional Physical Therapy Prerequisite Courses

Code	Title	Hours
PSYC 105	Introduction to Psychology	3
PSYC (additional)	See My Rock Audit for options	
<b>Total Hours</b>		<b>3</b>

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student

success and participation in the following types of programs and activities:

1. Volunteering
2. Job Shadowing

## Doctor of Physical Therapy (DPT) Prerequisite Admission Requirements – Pre-Physical Therapy SRU 3+3

### For Application Requirements

Please refer to Slippery Rock University's Physical Therapy (Doctor of Physical Therapy) website for requirements: [www.sru.edu/PT/](http://www.sru.edu/PT/) (<http://www.sru.edu/PT/>).

### Rock Studies 2

Code	Title	Hours
<b>Prerequisite Courses - SRU Physical Therapy</b>		
Select one of the following:		6-8
BIOL 209 & BIOL 309	and	
BIOL 340 & BIOL 410	Vertebrate Anatomy with Lab and Animal Physiology with Lab	
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
Select one of the following:		8
PHYS 201 & PHYS 202	Elements of Physics I with Lab and Elements of Physics II/ Lab	
PHYS 216 & PHYS 217	University Physics 1 with Lab and University Physics 2 with Lab	
STAT 152 or BIOL 325	Elementary Statistics I Biometry with Lab	3
PSYC 105	Introduction to Psychology	3
Additional Psychology Course <sup>1</sup>		3
<b>Total Hours</b>		<b>31-33</b>

<sup>1</sup> See My Rock Audit for specific courses.

### Requirements for Pre-Physical Therapy SRU 3+3

If any of these requirements are not met, the 3+3 designation will be removed from the student's record:

1. A 3.0 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Physical Therapy SRU 3+3 program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

### Provision

Should a Pre-Physical Therapy SRU 3+3 student be unsuccessful in completing the 1st two semesters (fall or spring) of the Doctor of Physical Therapy Program and wants to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, Physical Therapy courses will count toward the completion of his/her undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the Doctor of Physical Therapy Program with an earned Bachelor's degree.



## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

BIOLOGY - PROFESSIONAL - BS (6108)

PRE-PT SRU 3+3 (61P8)

This program is effective as of Summer 2022

Revised 04.20.2022

UCC 02.01.2022

## Recommended Three-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ESAP 101	FYRST Seminar <sup>*</sup>	1
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
Creative & Aesthetic Inquiry (p. 29)		3
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>17</b>
<b>Second Year</b>		
<b>Fall</b>		
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
BIOL 250	Genetics with Lab	4
CHEM 201	Organic Chemistry I	3
CHEM 211	Organic Chemistry Laboratory I	1
Social Science Inquiry (p. 29)		3
PSYC 105	Introduction to Psychology (Recommended for Social Science Inquiry Requirement)	3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>17</b>

### Spring

CHEM 202	Organic Chemistry II	3
CHEM 212	Organic Chemistry Laboratory II	1
BIOL 325	Biometry with Lab	3
MATH 225 or MATH 125	Calculus I or Precalculus	4
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>14</b>

### Third Year

#### Fall

BIOL 340	Vertebrate Anatomy with Lab	3
BIOL 410	Animal Physiology with Lab	3
CHEM 335	Biochemistry I	3
PHYS 201 or PHYS 216	Elements of Physics I with Lab or University Physics 1 with Lab	4
PSYC (Additional) –See My Rock Audit for Options		3
<b>Hours</b>		<b>16</b>

#### Spring

BIOL 325	Biometry with Lab	3
BIOL 330	Microbiology/Lab	3
PHYS 202 or PHYS 217	Elements of Physics II/ Lab or University Physics 2 with Lab	4
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>16</b>

### Fourth Year

#### Fall

Physical Therapy Program		
<b>Hours</b>		<b>0</b>

#### Spring

Physical Therapy Program		
<b>Hours</b>		<b>0</b>
<b>Total Hours**</b>		<b>95</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>\*</sup> Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6108

Concentration Code: 61P8

Revised Date: 04.21.22

# Biology, Bachelor of Science (BS) - Concentration in Professional / Pre-Physical Therapy (SRU) (Traditional)

## Biology Program Learning Outcomes

- **Competence in Laboratory and Research Skills:** To conduct, assess, and communicate research investigations using established scientific practices.
- **Core Concepts for Biological Literacy:**
  - Knowledge/Content:
    - Evolution
    - Structure and function across all levels of biological organization
    - Diversity and interactions of life
    - Information flow, exchange and storage in biological systems
  - Critical Thinking/Problem Solving:
    - Connect information from cognate science courses and liberal arts courses to biological concepts
    - Apply scientific information to current and future societal problems
- **Participation in Diverse, Enriching Scientific Activities:** Apply technical and professional skills in hands-on laboratory, clinical or field experiences.
- **Professional Attitude:** Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.

## What are your options?

**Pre-Physical Therapy SRU 3+3:** Earn a Doctor of Physical Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU DPT program. During your third undergraduate year, you apply for admission into the SRU DPT program. If accepted, your first year in the SRU DPT program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Physical Therapy (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU DPT program and apply to the SRU DPT program in your senior year.

## Related Links

Biology - Pre-Physical Therapy, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/biology-pre-physical-therapy/>)

Biology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/biology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 3.0 or higher

Core GPA: 2.0 or higher

## Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	59
	Natural Science and Math College-Wide Requirements	12
	Electives	16

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 125	Precalculus	4
or MATH 225	Calculus I	
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16

### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
<i>Physical Sciences Inquiry</i>		
PHYS 201	Elements of Physics I with Lab	4
or PHYS 216	University Physics 1 with Lab	
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>45</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 credits must be taken at the 300 level or above
- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Students must earn a "C" or better in both Biology I with Lab (BIOL 113) and Biology II with Lab (BIOL 114) before proceeding to their next biology course.
- Students must earn a "C" or better in both Genetics with Lab (BIOL 250) and Biometry and Lab (BIOL 325) prior to graduating.

Code	Title	Hours
<b>Biology Core Requirements</b>		
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 250	Genetics with Lab <sup>1,2</sup>	4
BIOL 325	Biometry with Lab <sup>1</sup>	3
<b>Subtotal</b>		<b>15</b>
<b>Required Upper-Level Biology</b>		
BIOL 492	Biology Seminar <sup>1</sup>	1
<b>Subtotal</b>		<b>1</b>
<b>Upper-Level Biology Electives</b>		
Select five courses of the following:		15
BIOL 330	Microbiology/Lab <sup>1</sup>	

BIOL 335	Cell Biology/Lab <sup>1</sup>	
BIOL 340	Vertebrate Anatomy with Lab <sup>1</sup>	
BIOL 370	Molecular Biology with Lab <sup>1</sup>	
BIOL 401	Ecology with Lab <sup>1</sup>	
BIOL 410	Animal Physiology with Lab <sup>1</sup>	
BIOL 451	Plant Physiology/Lab <sup>1</sup>	
<b>Subtotal</b>		<b>15</b>

### Additional Upper-Level Biology Electives

Select 6 credits which can come from courses not chosen above, or any 300/400 level course listed below. Additional electives may be selected from the Marine Science offerings listed below. PLE courses are only offered during the summer months through our affiliation with Pymatuning Laboratory of Ecology.

Upper-Level Biology Electives (p. 344)		
<b>Subtotal</b>		<b>6</b>

### Related Sciences – Chemistry

CHEM 108	General Chemistry II <sup>3</sup>	3
CHEM 112	General Chemistry II Lab <sup>3</sup>	1
CHEM 201	Organic Chemistry I <sup>3</sup>	3
CHEM 202	Organic Chemistry II <sup>3</sup>	3
CHEM 211	Organic Chemistry Laboratory I <sup>3</sup>	1
CHEM 212	Organic Chemistry Laboratory II <sup>3</sup>	1
<b>Subtotal</b>		<b>12</b>

### Related Sciences – Chemistry Advanced Elective

Select one of the following:		3
CHEM 301	Physical Chemistry I <sup>3</sup>	
CHEM 335	Biochemistry I <sup>3</sup>	

### Related Sciences – Physics

PHYS 202	Elements of Physics II/ Lab	4
or PHYS 217	University Physics 2 with Lab	

### Independent Study Option

Select one of the following options:

<i>Independent Study Option</i>		
BIOL 490	Independent Study	

### Non-Independent Study Option

Select 3 credits in BIOL or MARS course from Additional Upper-Level Biology Electives below.

Upper-Level Biology Electives (p. 344)		
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### Major Field Test

Field Test required of all Biology students before graduation

<b>Total Hours</b>	<b>59</b>
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- <sup>1</sup> Course counts for 50% of Major requirements and Major GPA
- <sup>2</sup> Core GPA
- <sup>3</sup> Course counts for 50% of Major requirements but not for Major GPA
- <sup>4</sup> With the exception of BIOL 300, BIOL 314, BIOL 315, BIOL 316, BIOL 319, BIOL 345
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**Natural Science and Math College-Wide Requirements**

Code	Title	Hours
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
MATH 125	Precalculus	4
or MATH 225	Calculus I	
PHYS 201	Elements of Physics I with Lab	4
or PHYS 216	University Physics 1 with Lab	

**Additional Physical Therapy Prerequisite Courses**

Code	Title	Hours
BIOL 216	Anatomy and Physiology I with Lab	3
BIOL 217	Anatomy and Physiology II with Lab	3
PSYC 105	Introduction to Psychology	3
PSYC XXX	See My Rock Audit for options	3

**Additional Upper-Level Biology Electives**

Code	Title	Hours
BIOL 301	Forest Ecology <sup>1</sup>	3
BIOL 302	Ecology of Amphibians & Reptiles/Lab <sup>1</sup>	3
BIOL 303	Behavioral Ecology/Lab <sup>1</sup>	3
BIOL 305	Wetlands and Aquatic Plants/Lab <sup>1</sup>	3
BIOL 306	Freshwater Biomonitoring/Lab <sup>1</sup>	3
BIOL 307	Vertebrate Ecology/Lab <sup>1</sup>	3
BIOL 308	Aquatic Ecosystem Management / Lab <sup>1</sup>	3
BIOL 310	Plant Systematics with Lab <sup>1</sup>	3
BIOL 311	Entomology/Lab <sup>1</sup>	3
BIOL 313	Herpetology/Lab <sup>1</sup>	3
BIOL 314	Medical Parasitology with Lab <sup>1</sup>	1
BIOL 315	<sup>1</sup>	1
BIOL 316	Medical Immunology with Lab <sup>1</sup>	1
BIOL 317	Ecology and Fungi <sup>1</sup>	3
BIOL 319	Medical Virology with a Lab	1
BIOL 320	Ornithology/Lab <sup>1</sup>	3
BIOL 321	Wildlife Management/Lab <sup>1</sup>	3
BIOL 322	Conservation Biology/Lab <sup>1</sup>	3
BIOL 323	Stream Ecology/Lab <sup>1</sup>	3
BIOL 326	Field Methods in Biogeography/Lab <sup>1</sup>	3
BIOL 327	Limnology/Lab <sup>1</sup>	3
BIOL 331	Mammology/Lab <sup>1</sup>	3
BIOL 343	Embryology with Lab <sup>1</sup>	3
BIOL 345	<sup>1</sup>	2
BIOL 350	Evolution <sup>1</sup>	3
BIOL 356	Field Ecology / Lab <sup>1</sup>	3
BIOL 357	Environmental Microbiology with Lab <sup>1</sup>	4
BIOL 360	Field Botany <sup>1</sup>	3
BIOL 361	Flora of Western Pennsylvania <sup>1</sup>	3
BIOL 371	Vertebrate Field Zoology <sup>1</sup>	3
BIOL 373	Ichthyology/Lab <sup>1</sup>	3
BIOL 375	Ecology of Fish / Lab <sup>1</sup>	3
BIOL 402	Biogeography/Lab <sup>1</sup>	3
BIOL 405	Animal Physiological Ecology with Lab <sup>1</sup>	4

BIOL 412	Population Biology <sup>1</sup>	3
BIOL 430	Pathogenic Microbiology with Lab <sup>1</sup>	3
BIOL 450	Biology Internship <sup>1</sup>	3
BIOL 465	<sup>1</sup>	3
BIOL 470	Histology with Lab <sup>1</sup>	3
BIOL 498	Selected Topics <sup>1</sup>	3
MARS 221	Marine Invertebrates <sup>1</sup>	3
MARS 241	Marine Biology <sup>1</sup>	3
MARS 250	Wetland Ecology <sup>1</sup>	3
MARS 260	Marine Ecology <sup>1</sup>	3
MARS 270	Coastal Vegetation <sup>1</sup>	3
MARS 298	Selected Topics <sup>1</sup>	3
MARS 300	Behavior of Marine Organisms <sup>1</sup>	3
MARS 310	The Mammals of Coastal Ecosystems <sup>1</sup>	3
MARS 320	Marine Microbiology <sup>1</sup>	3
MARS 330	Tropical Invertebrates <sup>1</sup>	3
MARS 342	Marine Botany <sup>1</sup>	3
MARS 343	Marine Ichthyology <sup>1</sup>	3
MARS 344	Anatomy of Marine Chordates <sup>1</sup>	3
MARS 345	Ornithology <sup>1</sup>	3
MARS 350	Physiology of Marine Invertebrates <sup>1</sup>	3
MARS 398	Selected Topics <sup>1</sup>	3
MARS 420	Marine Micropaleontology <sup>1</sup>	3
MARS 431	Ecology of Marine Plankton <sup>1</sup>	3
MARS 441	Biology of Molluscs <sup>1</sup>	3
MARS 490	Independent Study <sup>1</sup>	3
MARS 491	Coral Reef Ecology <sup>1</sup>	3
MARS 492	Marine Mammals <sup>1</sup>	3
MARS 498	Selected Topics <sup>1</sup>	3
MARS 500	Problems in Marine Science <sup>1</sup>	3

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

**Co-Curricular and Experiential Learning**

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Volunteering
2. Job Shadowing

**Doctor of Physical Therapy (DPT)  
Prerequisite Admission Requirements****For Application Requirements**

Please refer to Slippery Rock University's Physical Therapy (Doctor of Physical Therapy) website for requirements: [www.sru.edu/PT/](http://www.sru.edu/PT/) (<http://www.sru.edu/PT/>)

**Rock Studies 2**

Code	Title	Hours
<b>Prerequisite Courses - SRU Physical Therapy</b>		
Select one of the following:		6-8
BIOL 209	and	
& BIOL 309		

BIOL 340 & BIOL 410	Vertebrate Anatomy with Lab and Animal Physiology with Lab	
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
Select one of the following:		8
PHYS 201 & PHYS 202	Elements of Physics I with Lab and Elements of Physics II/ Lab	
PHYS 211 & PHYS 213	General Physics I with Lab and General Physics III/ Lab	
STAT 152 or BIOL 325	Elementary Statistics I Biometry with Lab	3
PSYC 105	Introduction to Psychology	3
Additional Psychology Course <sup>1</sup>		3
<b>Total Hours</b>		<b>31-33</b>

<sup>1</sup> See My Rock Audit for specific courses.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

BIOLOGY – PROFESSIONAL – BS (6108)

PRE-PT Traditional

Effective Summer 2022

Revised 09.23.2022

UCC 2.1.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1

Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>14</b>
<b>Second Year</b>		
<b>Fall</b>		
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
BIOL 250	Genetics with Lab	4
CHEM 201	Organic Chemistry I	3
CHEM 211	Organic Chemistry Laboratory I	1
Humanities Inquiry (p. 29)		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
BIOL 325	Biometry with Lab	3
MATH 125 or MATH 225	Precalculus or Calculus I	4
CHEM 202	Organic Chemistry II	3
CHEM 212	Organic Chemistry Laboratory II	1
PSYC 105	Introduction to Psychology	3
Social Science Inquiry (p. 29)		3
<b>Hours</b>		<b>17</b>
<b>Third Year</b>		
<b>Fall</b>		
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
CHEM 335 or CHEM 301	Biochemistry I or Physical Chemistry I	3
BIOL 300+	Upper Level BIOL Elective	3
BIOL 300+	Upper Level BIOL Elective	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
PSYC XXX	See My Rock Audit for options	3
BIOL 216	Anatomy and Physiology I with Lab	3
BIOL 300	Social and Ethical Issues in Genetics	3
BIOL 330	Microbiology/Lab	3
Thematic Thread Requirement (p. 29)		
<b>Hours</b>		<b>12</b>
<b>Fourth Year</b>		
<b>Fall</b>		
PHYS 201 or PHYS 216	Elements of Physics I with Lab or University Physics 1 with Lab	4
BIOL 217	Anatomy and Physiology II with Lab	3
BIOL 300+	Upper Level BIOL Elective	3
BIOL 300+	Upper Level BIOL Elective	3
Free Elective		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
PSYC XXX	See My Rock Audit for options	3
PHYS 202 or PHYS 217	Elements of Physics II/ Lab or University Physics 2 with Lab	4
BIOL 300+	Upper Level BIOL Elective	3



BIOL 300+	Upper Level BIOL Elective	3
BIOL 490	Independent Study <sup>4</sup>	3
BIOL 492	Biology Seminar	1
<b>Hours</b>		<b>17</b>
<b>Total Hours**</b>		<b>120</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>4</sup> or BIOL 300+: Upper Level BIOL Elective

<sup>3</sup> or BIOL 300/400 level (except BIOL 300, BIOL 314, BIOL 315, BIOL 316, BIOL 319, or BIOL 345).

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6108

Concentration Code: PRFL

Revised Date: 09.26.2022

## Biology, Bachelor of Science (BS) - Concentration in Professional / Pre-Physician Assistant (SRU) (3+2)

### Biology Program Learning Outcomes

- **Competence in Laboratory and Research Skills:** To conduct, assess, and communicate research investigations using established scientific practices.
- **Core Concepts for Biological Literacy:**
  - Knowledge/Content:
    - Evolution
    - Structure and function across all levels of biological organization
    - Diversity and interactions of life
    - Information flow, exchange and storage in biological systems
  - Critical Thinking/Problem Solving:
    - Connect information from cognate science courses and liberal arts courses to biological concepts
    - Apply scientific information to current and future societal problems
- **Participation in Diverse, Enriching Scientific Activities:** Apply technical and professional skills in hands-on laboratory, clinical or field experiences.
- **Professional Attitude:** Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.

### What are your options?

**Pre-Physician Assistant SRU 3+2:** Earn a Master of Science degree in Physician Assistant Studies in five years rather than six. In the first three

years, you complete your major courses and pre-requisites for the SRU PA program. At the end of your second year, you apply for admission into the SRU PA program. If accepted, your first year in the SRU PA program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Physician Assistant (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU PA program and apply to the SRU PA program in your senior year.

### Related Links

Biology - Pre-Physician Assistant, BS Program Pag (<https://www.sru.edu/academics/majors-and-minors/biology-pre-physician-assistant/>)e

Biology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/biology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

### Curriculum Guide

#### GPA Requirement

##### 1st Major: Biology

- Overall GPA: 2.00 or higher
- Major GPA (only includes Biology courses): 2.00 or higher

##### 2nd Major: Pre-PA SRU 3+2 Biology

- Overall GPA: 3.25 or higher

#### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	41
	Natural Science and Math College-Wide Requirements	12
	Electives	34

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the 1<sup>st</sup> year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.

#### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 225	Calculus I	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	

POLS 235	Civil Discourse and Democracy	
<b>Subtotal</b>		<b>16</b>
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Social Science Inquiry (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
<i>Physical Sciences Inquiry</i>		
PHYS 201	Elements of Physics I with Lab	4
or PHYS 216	University Physics 1 with Lab	
<b>Subtotal</b>		<b>17</b>
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>45</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Before progressing to a 200-level course, students must achieve a 2.000 average in Principles of Biology - BIOL 104.
- Students must earn a "C" or better in both Biology I with Lab (BIOL 113) and Biology II with Lab (BIOL 114) before proceeding to their next biology course.
- Students must earn a "C" or better in both Genetics with Lab (BIOL 250) and Biometry with Lab (BIOL 325) prior to graduating.
- If you choose to pursue Pre-Physician Assistant SRU 3+2 Biology and are not accepted into the PA program, then additional coursework is required to complete a first major of Biology-Professional. Please refer to the Biology-Professional Curriculum Guide.
- To view the SRU policy on senior undergraduate students earning graduate credit, click here (<https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/>).

Code	Title	Hours
<b>Biology Core Requirements</b>		
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 250	Genetics with Lab	4
BIOL 325	Biometry with Lab	3
<b>Subtotal</b>		<b>15</b>
<b>Required Upper-Level Biology</b>		
BIOL 330	Microbiology/Lab	3
BIOL 492	Biology Seminar	1
<b>Subtotal</b>		<b>4</b>
<b>Upper Division Elective Courses</b>		
Select two of the following:		6
BIOL 335	Cell Biology/Lab	
BIOL 340	Vertebrate Anatomy with Lab	
BIOL 370	Molecular Biology with Lab	
BIOL 410	Animal Physiology with Lab	
<b>Subtotal</b>		<b>6</b>
<b>Required Courses from other Departments</b>		
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
CHEM 201	Organic Chemistry I	3
CHEM 202	Organic Chemistry II	3
CHEM 211	Organic Chemistry Laboratory I	1
CHEM 212	Organic Chemistry Laboratory II	1
PHYS 202	Elements of Physics II/ Lab	4
or PHYS 217	University Physics 2 with Lab	
<b>Subtotal</b>		<b>16</b>

## Major Field Test

Field Test required of all Biology students before graduation

**Total Hours** 41

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
MATH 125 or MATH 225	Precalculus Calculus I	4
PHYS 201 or PHYS 216	Elements of Physics I with Lab University Physics 1 with Lab	4

## Additional Physician Assistant Prerequisite Course

Code	Title	Hours
BIOL 216	Anatomy and Physiology I with Lab	3
BIOL 217	Anatomy and Physiology II with Lab	3
EXSC 250 or HCAM 250	Medical Terminology Medical Terminology for Healthcare Administrators	3
PSYC 105	Introduction to Psychology	3

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Volunteering
2. Job Shadowing

## Physician Assistant Studies (Master of Science in Physician Assistant Studies) Prerequisite Admission Requirements – Pre- Physician Assistant 3+2

### For Application Requirements

Please refer to Slippery Rock University's Physician Assistant Studies (Master of Science in Physician Assistant Studies) website for requirements: <http://www.sru.edu/pa> (<http://www.sru.edu/pa/>)

### Rock Studies 2

Code	Title	Hours
<b>Prerequisite Courses - SRU Physician Assistant</b>		
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 210 or BIOL 330	Medical Microbiology with Lab Microbiology/Lab	3
BIOL 209		4
BIOL 309		4
BIOL 250	Genetics with Lab	4
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4

CHEM 201	Organic Chemistry I	3
EXSC 250 or HCAM 250	Medical Terminology Medical Terminology for Healthcare Administrators	3
PSYC 105	Introduction to Psychology	3
Inferential Statistics Course <sup>1</sup>		3
<b>Total Hours</b>		<b>39</b>

<sup>1</sup> Any statistics course with inferential statistics embedded. See My Rock Audit for specific courses.

## Pre-Physician Assistant SRU 3+2 Requirements

**If any of these requirements are not met, the 3+2 designation will be removed from the student's record:**

1. A 3.25 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Physician Assistant SRU 3+2 program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

### Provision

Should a Pre-Physician Assistant SRU 3+2 student be unsuccessful in completing the 1<sup>st</sup> two semesters (summer or fall) of the Physician Assistant Program and wants to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, Physician Assistant courses will count toward the completion of his/her undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the Physician Assistant Studies Program with an earned Bachelor's degree.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

BIOLOGY - BS (6108)

PRE-PA SRU 3+2 (6SPB)

This program is effective as of Summer 2022

Revised 04.20.2022

UCC 02.01.2022

## Recommended Three-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1

SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
Creative & Aesthetic Inquiry (p. 29)		3
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>17</b>

**Second Year****Fall**

Select one of the following: 3

COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
PSYC 105	Introduction to Psychology	3
Social Science Inquiry (p. 29)		3
BIOL 250	Genetics with Lab	4
CHEM 201	Organic Chemistry I	3
CHEM 211	Organic Chemistry Laboratory I	1
<b>Hours</b>		<b>17</b>

**Spring**

Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
BIOL 325	Biometry with Lab	3
BIOL 330	Microbiology/Lab	3
CHEM 202	Organic Chemistry II	3
CHEM 212	Organic Chemistry Laboratory II	1
<b>Hours</b>		<b>16</b>

**Third Year****Fall**

Thematic Thread Requirement (p. 29)		3
BIOL 216	Anatomy and Physiology I with Lab	3
BIOL 492	Biology Seminar	1
PHYS 201	Elements of Physics I with Lab	4
or PHYS 216	or University Physics 1 with Lab	
MATH 225	Calculus I	4
or MATH 125	or Precalculus	
<b>Hours</b>		<b>15</b>

**Spring**

BIOL 217	Anatomy and Physiology II with Lab	3
BIOL 300+	Upper Level BIOL Elective	3
BIOL 300+	Upper Level BIOL Elective	3
EXSC 250	Medical Terminology	3
or HCAM 250	or Medical Terminology for Healthcare Administrators	
PHYS 202	Elements of Physics II/ Lab	4
or PHYS 217	or University Physics 2 with Lab	
<b>Hours</b>		<b>16</b>

**Fourth Year****Fall**

PA Program Didactic	
<b>Hours</b>	
<b>0</b>	
<b>Spring</b>	
PA Program Didactic	
<b>Hours</b>	
<b>0</b>	
<b>Total Hours**</b>	
<b>96</b>	

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6108

Concentration Code: 6SPB

Revised Date: 04.21.22

## Biology, Bachelor of Science (BS) - Concentration in Professional / Pre-Physician Assistant (SRU) (Traditional)

### Biology Program Learning Outcomes

- **Competence in Laboratory and Research Skills:** To conduct, assess, and communicate research investigations using established scientific practices.
- **Core Concepts for Biological Literacy:**
  - Knowledge/Content:
    - Evolution
    - Structure and function across all levels of biological organization
    - Diversity and interactions of life
    - Information flow, exchange and storage in biological systems
  - Critical Thinking/Problem Solving:
    - Connect information from cognate science courses and liberal arts courses to biological concepts
    - Apply scientific information to current and future societal problems
- **Participation in Diverse, Enriching Scientific Activities:** Apply technical and professional skills in hands-on laboratory, clinical or field experiences.
- **Professional Attitude:** Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.

### What are your options?

**Pre-Physician Assistant SRU 3+2:** Earn a Master of Science degree in Physician Assistant Studies in five years rather than six. In the first three years, you complete your major courses and pre-requisites for the SRU

PA program. At the end of your second year, you apply for admission into the SRU PA program. If accepted, your first year in the SRU PA program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Physician Assistant (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU PA program and apply to the SRU PA program in your senior year.

Related Links

Biology - Pre-Physician Assistant, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/biology-pre-physician-assistant/>)

Biology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/biology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

Curriculum Guide

GPA Requirement

Major GPA: 2.0 or higher  
Overall GPA: 2.0 or higher  
Core GPA: 2.0 or higher

Summary\*

Code	Title	Hours
Rock Studies 2 Requirements		45
Other Basic Requirements		0-3
Computer Competency		0-3
Major Requirements		59
Natural Science and Math College-Wide Requirements		12
Electives		16

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	University Seminar <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 125 or MATH 225	Precalculus Calculus I	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3

<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
<i>Physical Sciences Inquiry</i>		
PHYS 201 or PHYS 216	Elements of Physics I with Lab University Physics 1 with Lab	4
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>45</b>

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject
- <sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.



## Major Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above
- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Students must earn a "C" or better in both Biology I with Lab (BIOL 113) and Biology II with Lab (BIOL 114) before proceeding to their next biology course.
- Students must earn a "C" or better in both Genetics with Lab (BIOL 250) and Biometry with Lab (BIOL 325) prior to graduating.

Code	Title	Hours
<b>Biology Core Requirements</b>		
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 250	Genetics with Lab <sup>1,2</sup>	4
BIOL 325	Biometry with Lab <sup>1</sup>	3
Subtotal		15

### Required Upper-Level Biology

BIOL 492	Biology Seminar <sup>1</sup>	1
Subtotal		1

### Upper-Level Biology Electives

Select five courses of the following:		15
BIOL 330	Microbiology/Lab <sup>1</sup>	
BIOL 335	Cell Biology/Lab <sup>1</sup>	
BIOL 340	Vertebrate Anatomy with Lab <sup>1</sup>	
BIOL 370	Molecular Biology with Lab <sup>1</sup>	
BIOL 401	Ecology with Lab <sup>1</sup>	
BIOL 410	Animal Physiology with Lab <sup>1</sup>	
BIOL 451	Plant Physiology/Lab <sup>1</sup>	
Subtotal		15

### Additional Upper-Level Biology Electives

Select 6 credits which can come from courses not chosen above, or any 300/400 level course listed below. Additional electives may be selected from the Marine Science offerings listed below. PLE courses are only offered during the summer months through our affiliation with Pymatuning Laboratory of Ecology.

Upper-Level Biology Electives (p. 351)		
Subtotal		6

### Related Sciences – Chemistry

CHEM 108	General Chemistry II <sup>3</sup>	3
CHEM 112	General Chemistry II Lab <sup>3</sup>	1
CHEM 201	Organic Chemistry I <sup>3</sup>	3
CHEM 202	Organic Chemistry II <sup>3</sup>	3
CHEM 211	Organic Chemistry Laboratory I <sup>3</sup>	1
CHEM 212	Organic Chemistry Laboratory II <sup>3</sup>	1
Subtotal		12

### Related Sciences – Chemistry Advanced Elective

Select one of the following:		3
CHEM 301	Physical Chemistry I <sup>3</sup>	
CHEM 335	Biochemistry I <sup>3</sup>	

### Related Sciences – Physics

PHYS 202	Elements of Physics II/ Lab	4
or PHYS 217	University Physics 2 with Lab	

### Independent Study Option

Select one of the following options: 3

### Independent Study Option

BIOL 490 Independent Study

### Non-Independent Study Option

Select 3 credits in BIOL or MARS course from Additional Upper-Level Biology Electives below.

Upper-Level Biology Electives (p. 351)

### Major Field Test

Field Test required of all Biology students before graduation

**Total Hours 59**

- <sup>1</sup> Course counts for 50% of Major requirements and Major GPA
  - <sup>2</sup> Core GPA
  - <sup>3</sup> Course counts for 50% of Major requirements but not for Major GPA
  - <sup>4</sup> With the exception of BIOL 300, BIOL 314, BIOL 315, BIOL 316, BIOL 319, BIOL 345
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
MATH 125	Precalculus	4
or MATH 225	Calculus I	
PHYS 201	Elements of Physics I with Lab	4
or PHYS 216	University Physics 1 with Lab	

## Additional Physician Assistant Prerequisite Courses

Code	Title	Hours
BIOL 216	Anatomy and Physiology I with Lab	3
BIOL 217	Anatomy and Physiology II with Lab	3
EXSC 250	Medical Terminology	3
or HCAM 250	Medical Terminology for Healthcare Administrators	

## Additional Upper-Level Biology Electives

Code	Title	Hours
BIOL 301	Forest Ecology <sup>1</sup>	3
BIOL 302	Ecology of Amphibians & Reptiles/Lab <sup>1</sup>	3
BIOL 303	Behavioral Ecology/Lab <sup>1</sup>	3
BIOL 305	Wetlands and Aquatic Plants/Lab <sup>1</sup>	3
BIOL 306	Freshwater Biomonitoring/Lab <sup>1</sup>	3
BIOL 307	Vertebrate Ecology/Lab <sup>1</sup>	3
BIOL 308	Aquatic Ecosystem Management / Lab <sup>1</sup>	3
BIOL 310	Plant Systematics with Lab <sup>1</sup>	3
BIOL 311	Entomology/Lab <sup>1</sup>	3
BIOL 313	Herpetology/Lab <sup>1</sup>	3
BIOL 314	Medical Parasitology with Lab <sup>1</sup>	1
BIOL 315	<sup>1</sup>	1

BIOL 316	Medical Immunology with Lab <sup>1</sup>	1
BIOL 317	Ecology and Fungi <sup>1</sup>	3
BIOL 319	Medical Virology with a Lab	1
BIOL 320	Ornithology/Lab <sup>1</sup>	3
BIOL 321	Wildlife Management/Lab <sup>1</sup>	3
BIOL 322	Conservation Biology/Lab <sup>1</sup>	3
BIOL 323	Stream Ecology/Lab <sup>1</sup>	3
BIOL 326	Field Methods in Biogeography/Lab <sup>1</sup>	3
BIOL 327	Limnology/Lab <sup>1</sup>	3
BIOL 331	Mammalogy/Lab <sup>1</sup>	3
BIOL 343	Embryology with Lab <sup>1</sup>	3
BIOL 345	<sup>1</sup>	2
BIOL 350	Evolution <sup>1</sup>	3
BIOL 356	Field Ecology / Lab <sup>1</sup>	3
BIOL 357	Environmental Microbiology with Lab <sup>1</sup>	4
BIOL 360	Field Botany <sup>1</sup>	3
BIOL 361	Flora of Western Pennsylvania <sup>1</sup>	3
BIOL 371	Vertebrate Field Zoology <sup>1</sup>	3
BIOL 373	Ichthyology/Lab <sup>1</sup>	3
BIOL 375	Ecology of Fish / Lab <sup>1</sup>	3
BIOL 402	Biogeography/Lab <sup>1</sup>	3
BIOL 405	Animal Physiological Ecology with Lab <sup>1</sup>	4
BIOL 412	Population Biology <sup>1</sup>	3
BIOL 430	Pathogenic Microbiology with Lab <sup>1</sup>	3
BIOL 450	Biology Internship <sup>1</sup>	3
BIOL 465	<sup>1</sup>	3
BIOL 470	Histology with Lab <sup>1</sup>	3
BIOL 498	Selected Topics <sup>1</sup>	3
MARS 221	Marine Invertebrates <sup>1</sup>	3
MARS 241	Marine Biology <sup>1</sup>	3
MARS 250	Wetland Ecology <sup>1</sup>	3
MARS 260	Marine Ecology <sup>1</sup>	3
MARS 270	Coastal Vegetation <sup>1</sup>	3
MARS 298	Selected Topics <sup>1</sup>	3
MARS 300	Behavior of Marine Organisms <sup>1</sup>	3
MARS 310	The Mammals of Coastal Ecosystems <sup>1</sup>	3
MARS 320	Marine Microbiology <sup>1</sup>	3
MARS 330	Tropical Invertebrates <sup>1</sup>	3
MARS 342	Marine Botany <sup>1</sup>	3
MARS 343	Marine Ichthyology <sup>1</sup>	3
MARS 344	Anatomy of Marine Chordates <sup>1</sup>	3
MARS 345	Ornithology <sup>1</sup>	3
MARS 350	Physiology of Marine Invertebrates <sup>1</sup>	3
MARS 398	Selected Topics <sup>1</sup>	3
MARS 420	Marine Micropaleontology <sup>1</sup>	3
MARS 431	Ecology of Marine Plankton <sup>1</sup>	3
MARS 441	Biology of Molluscs <sup>1</sup>	3
MARS 490	Independent Study <sup>1</sup>	3
MARS 491	Coral Reef Ecology <sup>1</sup>	3
MARS 492	Marine Mammals <sup>1</sup>	3
MARS 498	Selected Topics <sup>1</sup>	3
MARS 500	Problems in Marine Science <sup>1</sup>	3

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

## Co-Curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Volunteering
2. Job Shadowing

## Physician Assistant Studies (Master of Science in Physician Assistant Studies)

### Prerequisite Admission Requirements

#### For Application Requirements

Please refer to Slippery Rock University's Physician Assistant Studies (Master of Science in Physician Assistant Studies) website for requirements: <http://www.sru.edu/pa> (<http://www.sru.edu/pa/>).

### Rock Studies 2

Code	Title	Hours
<b>Prerequisite Courses - SRU Physician Assistant</b>		
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 209		4
BIOL 309		4
BIOL 250	Genetics with Lab	4
BIOL 210 or BIOL 330	Medical Microbiology with Lab Microbiology/Lab	3
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
CHEM 201	Organic Chemistry I	3
EXSC 250 or HCAM 250	Medical Terminology Medical Terminology for Healthcare Administrators	3
PSYC 105	Introduction to Psychology	3
Inferential Statistics Course <sup>1</sup>		3
<b>Total Hours</b>		<b>39</b>

<sup>1</sup> Any statistics course with inferential statistics embedded. See My Rock Audit for specific courses.

BIOLOGY – PROFESSIONAL – BS (6108)

PRE-PA Traditional

Effective Fall 2019

Revised 12.15.2020

UCC 2/5/2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information*

on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>14</b>
<b>Second Year</b>		
<b>Fall</b>		
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
BIOL 250	Genetics with Lab	4
CHEM 201	Organic Chemistry I	3
CHEM 211	Organic Chemistry Laboratory I	1
Humanities Inquiry (p. 29)		3
Social Science Inquiry (p. 29)		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
Thematic Thread Requirement (p. 29) <sup>3</sup>		3
BIOL 325	Biometry with Lab	3
CHEM 202	Organic Chemistry II	3
CHEM 212	Organic Chemistry Laboratory II	1
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>13</b>
<b>Third Year</b>		
<b>Fall</b>		
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
CHEM 335	Biochemistry I	3
or CHEM 301	or Physical Chemistry I	
BIOL 300+	Upper Level BIOL Elective	3

BIOL 300+	Upper Level BIOL Elective	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
MATH 125 or MATH 225	Precalculus or Calculus I	4
BIOL 216	Anatomy and Physiology I with Lab	3
BIOL 300+	Upper Level BIOL Elective	3
BIOL 330	Microbiology/Lab	3
Free Elective		2
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
PHYS 201/216	Elements of Physics I with Lab	4
BIOL 217	Anatomy and Physiology II with Lab	3
BIOL 300+	Upper Level BIOL Elective	3
BIOL 300+	Upper Level BIOL Elective	3
Free Elective		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
EXSC 250 or HCAM 250	Medical Terminology or Medical Terminology for Healthcare Administrators	3
PHYS 202 or PHYS 317	Elements of Physics II/ Lab or Space Science	4
BIOL 300+	Upper Level BIOL Elective	3
BIOL 490	Independent Study <sup>4</sup>	3
BIOL 492	Biology Seminar	1
<b>Hours</b>		<b>14</b>
<b>Total Hours**</b>		<b>119</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>4</sup> or BIOL 300+: Upper Level BIOL Elective

<sup>3</sup> PSYC 105 recommended

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6108

Concentration Code: PRFL

Revised Date: 09.26.2022

## Biology, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Biology, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/biology/>)

Biology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/biology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirements

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU.
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.
- Students must earn a "C" or better in both Biology I with Lab (BIOL 113) and Biology II with Lab (BIOL 114) before proceeding to their next biology course.
- Students must earn a "C" or better in both Genetics with Lab (BIOL 250) and Biometry with Lab (BIOL 325) prior to graduating.

Code	Title	Hours
<b>Required Courses</b>		
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 250	Genetics with Lab	4
BIOL 325	Biometry with Lab	3
<b>Electives (300 level or above)</b>		
Select a minimum of six credits from 300 Level or Above Electives		6
300 Level or Above Electives (p. 354)		
<b>Total Hours</b>		<b>21</b>

### 300 Level or above Electives

Code	Title	Hours
BIOL 301	Forest Ecology	3
BIOL 302	Ecology of Amphibians & Reptiles/Lab	3
BIOL 303	Behavioral Ecology/Lab	3
BIOL 305	Wetlands and Aquatic Plants/Lab	3
BIOL 306	Freshwater Biomonitoring/Lab	3
BIOL 307	Vertebrate Ecology/Lab	3
BIOL 308	Aquatic Ecosystem Management / Lab	3
BIOL 310	Plant Systematics with Lab	3
BIOL 311	Entomology/Lab	3
BIOL 313	Herpetology/Lab	3
BIOL 314	Medical Parasitology with Lab	1
BIOL 315		1
BIOL 316	Medical Immunology with Lab	1
BIOL 317	Ecology and Fungi	3
BIOL 319	Medical Virology with a Lab	1
BIOL 320	Ornithology/Lab	3
BIOL 321	Wildlife Management/Lab	3
BIOL 322	Conservation Biology/Lab	3

BIOL 323	Stream Ecology/Lab	3
BIOL 326	Field Methods in Biogeography/Lab	3
BIOL 327	Limnology/Lab	3
BIOL 330	Microbiology/Lab	3
BIOL 331	Mammology/Lab	3
BIOL 335	Cell Biology/Lab	3
BIOL 340	Vertebrate Anatomy with Lab	3
BIOL 343	Embryology with Lab	3
BIOL 345		2
BIOL 350	Evolution	3
BIOL 356	Field Ecology / Lab	3
BIOL 357	Environmental Microbiology with Lab	4
BIOL 360	Field Botany	3
BIOL 361	Flora of Western Pennsylvania	3
BIOL 370	Molecular Biology with Lab	3
BIOL 371	Vertebrate Field Zoology	3
BIOL 373	Ichthyology/Lab	3
BIOL 375	Ecology of Fish / Lab	3
BIOL 400	Disease Ecology	3
BIOL 401	Ecology with Lab	3
BIOL 402	Biogeography/Lab	3
BIOL 405	Animal Physiological Ecology with Lab	4
BIOL 410	Animal Physiology with Lab	3
BIOL 412	Population Biology	3
BIOL 430	Pathogenic Microbiology with Lab	3
BIOL 450	Biology Internship	3
BIOL 451	Plant Physiology/Lab	3
BIOL 465		3
BIOL 470	Histology with Lab	3
BIOL 498	Selected Topics	3
MARS 221	Marine Invertebrates	3
MARS 241	Marine Biology	3
MARS 250	Wetland Ecology	3
MARS 260	Marine Ecology	3
MARS 270	Coastal Vegetation	3
MARS 298	Selected Topics	3
MARS 300	Behavior of Marine Organisms	3
MARS 310	The Mammals of Coastal Ecosystems	3
MARS 320	Marine Microbiology	3
MARS 330	Tropical Invertebrates	3
MARS 342	Marine Botany	3
MARS 343	Marine Ichthyology	3
MARS 344	Anatomy of Marine Chordates	3
MARS 345	Ornithology	3
MARS 350	Physiology of Marine Invertebrates	3
MARS 398	Selected Topics	3
MARS 420	Marine Micropaleontology	3
MARS 431	Ecology of Marine Plankton	3
MARS 441	Biology of Molluscs	3
MARS 490	Independent Study	3
MARS 491	Coral Reef Ecology	3
MARS 492	Marine Mammals	3

MARS 498	Selected Topics	3
MARS 500	Problems in Marine Science	3

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN BIOLOGY (08A)

Revised 04.20.2022

UCC 02.01.2022

## Biology, Pre-Pharmacy (LECOM) (2+3)

The Lake Erie College of Osteopathic Medicine (LECOM) School of Pharmacy and Slippery Rock University (SRU) are committed to the training of future pharmacy practitioners. Slippery Rock University and LECOM School of Pharmacy offer an accelerated, five-year Doctor of Pharmacy program. Under this joint agreement students will successfully complete the two-year undergraduate program in pre-pharmacy at SRU and then matriculate into LECOM School of Pharmacy to complete the professional curriculum of the Doctor of Pharmacy degree (Pharm.D) in three years. The accelerated professional pharmacy curriculum at LECOM School of Pharmacy is offered in a 12-month program per academic year. Students participating in this program will not be awarded a Slippery Rock University degree.

For more information on admission requirements: <https://lecom.edu/admissions/entrance-requirements/early-acceptance-programs/>

## Program Learning Outcomes

- **Competence in Laboratory and Research Skills:** To conduct, assess, and communicate research investigations using established scientific practices.
- **Core Concepts for Biological Literacy:**
  - Knowledge/Content:
    - Evolution
    - Structure and function across all levels of biological organization
    - Diversity and interactions of life
    - Information flow, exchange and storage in biological systems
  - Critical Thinking/Problem Solving:
    - Connect information from cognate science courses and liberal arts courses to biological concepts
    - Apply scientific information to current and future societal problems
- **Participation in Diverse, Enriching Scientific Activities:** Apply technical and professional skills in hands-on laboratory, clinical or field experiences.

- **Professional Attitude:** Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.

## Related Links

Biology - LECOM Pre-Pharmacy, BS Program Page ([https://www.sru.edu/academics/majors-and-minors/biology-pre-pharmacy-23-\(lecom\)/](https://www.sru.edu/academics/majors-and-minors/biology-pre-pharmacy-23-(lecom)/))

Biology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/biology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Overall GPA: 3.4 or higher

Science GPA: 3.4 or higher

Math GPA: 3.4 or higher

### Summary

Code	Title	Hours
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements/Concentration	69
	Natural Science and Math College-Wide Requirements	12
	Electives	51

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
	Complete one of the following:	0-3
	Meet required minimum SAT or ACT math score OR	
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
	Demonstrate "computer competency" by one of the following:	0-3
	Pass Computer Competency Exam OR	
	Select one of the following at SRU or another post-secondary institution:	
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this



requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Biology Program Requirements

- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Students must earn a "C" or better in both Biology I with Lab (BIOL 113) and Biology II with Lab (BIOL 114) before proceeding to their next biology course.
- To view the SRU policy on senior undergraduate students earning graduate credit, click here (<https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/>).

## LECOM - Pre-Pharmacy Requirements

Code	Title	Hours
<b>Required Courses</b>		
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 250	Genetics with Lab	4
BIOL 325	Biometry with Lab	3
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
CHEM 201	Organic Chemistry I	3
CHEM 211	Organic Chemistry Laboratory I	1
CHEM 202	Organic Chemistry II	3
CHEM 212	Organic Chemistry Laboratory II	1
COMM 200	Civil Discourse: Theory & Practice	3
CPSC 110	Computer Concepts	3
ENGL 102	Critical Writing	3
ENGL 205	Introduction to Professional Writing	3
MATH 225	Calculus I	4
PHYS 216	University Physics 1 with Lab	4
Subtotal		51
<b>Economics Course</b>		
ECON elective		3
Subtotal		3
<b>Psychology Course</b>		
PSYC elective		3
Subtotal		3
<b>Psychology or Sociology Course</b>		
Select one of the following:		3
PSYC elective		
INDP 201	Principles of Sociology	
Subtotal		3
<b>General Electives</b>		
Select nine credits		9
Subtotal		9
<b>Total Hours</b>		<b>69</b>

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
Students must take the following four courses:		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
MATH 225	Calculus I	4
PHYS 216	University Physics 1 with Lab	4
<b>Total Hours</b>		<b>12</b>

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

DEPARTMENT OF BIOLOGY (61LP)

PRE PHARMACY (LECOM) PROGRAM

This program is effective as of Summer 2022

Revised 04.20.2022

UCC 02.01.2022

## RECOMMENDED two-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
BIOL 113	Biology I: Foundations of Ecology, Evolution and Diversity with Lab	4
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
ENGL 102	Critical Writing	3
MATH 225	Calculus I	4
ESAP 101	FYRST Seminar *	1
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
ENGL 205	Introduction to Professional Writing	3
CPSC 110	Computer Concepts	3
Elective		3
<b>Hours</b>		<b>17</b>
<b>Second Year</b>		
<b>Fall</b>		
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	

POLS 235	Civil Discourse and Democracy	
BIOL 250	Genetics with Lab	4
CHEM 201 & CHEM 211	Organic Chemistry I and Organic Chemistry Laboratory I	4
PHYS 201	Elements of Physics I with Lab	4
Elective		3
<b>Hours</b>		<b>18</b>
<b>Spring</b>		
Economics Elective		3
CHEM 202 & CHEM 212	Organic Chemistry II and Organic Chemistry Laboratory II	4
Psychology Elective		3
Behavioral Science Elective		3
BIOL 325	Biometry with Lab	3
<b>Hours</b>		<b>16</b>
<b>Total Hours**</b>		<b>67</b>

<sup>1</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 61LP

Revised date: 04.21.22

## Environmental Communication and Heritage Interpretation, Minor

This minor will provide students with an interdisciplinary understanding of cultural and natural resource communication and interpretation. Students will apply concepts from the fields of history, ecology, human dimensions of natural resources (including psychological, sociological, political, cultural and economic aspects), environmental education, environmental communication, adventure-based outdoor pursuits, interpretation and land management. Completing the minor will also enable students to achieve a nationally recognized certification as a Certified Interpretive Guide.

To access Minor Requirements, please view the Curriculum Guide tab.

## RELATED LINKS

Environmental Communication and Heritage Interpretation, Minor Program Page ([https://www.sru.edu/academics/majors-and-minors/environmental-communication-and-heritage-interpretation-\(minor\)/](https://www.sru.edu/academics/majors-and-minors/environmental-communication-and-heritage-interpretation-(minor)/))

Parks and Conservation Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/parks-and-conservation/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Minor GPA: 2.0 or higher

### MINOR REQUIREMENTS

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Core Courses</b>		
COMM 231	Principles of Integrated Marketing Communication & Public Relations	3
COMM 204 or PCRM 204	Environmental Communication	3
PCRM 347	Interpretive Methods and Programming	3
<b>Strategies Electives</b>		
Select two of the following, one must be COMM:		6
COMM 248	Interactive Multimedia 1	
COMM 254	Video Production	
COMM 307	Social Media	
PCRM 210	Resources for Outdoor Programming	
HIST 343	Public History	
HIST 411	Digital History	
<b>Content Electives</b>		
Select two of the following:		6
PCRM 377	Cultural Resources Management	
PCRM 348	Natural History of Ecosystems I	
BIOL 105	Environmental Biology	
EGEO 100	Environmental Geology	
EGEO 121	Meteorology/Lab	
EGEO 131	Oceanography	
GES 135	Introduction to Environmental Problems	
GES 150	The Natural Environment	
GES 355	Earth's Changing Climate	
HIST 323	African American History to 1876	
HIST 324	African American History Since 1876	
HIST 326	The Long Civil Rights Movement	
HIST 347	Twentieth Century British Culture	
HIST 350	The American Civil War	
HIST 371	History of Jews	
HIST 445	Americans and the Environment	
HIST 337	Native American History	
<b>Total Hours</b>		<b>21</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled

SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Minor in Environmental Communication and Heritage Interpretation (71D)  
This program is effective as of Fall 2018.  
Revised 10.28.2021

## Marine Science, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

### RELATED LINKS

Marine Science, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/marine-science-minor/>)

Biology Department Page (<https://www.sru.edu/academics/majors-and-minors/biology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

### CURRICULUM GUIDE

#### GPA REQUIREMENT

Minor GPA: 2.0 or higher

#### MINOR REQUIREMENTS

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (an upper division course includes any 3 credit course that requires a pre-requisite)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Courses</b>		
BIOL 101 or BIOL 104	General Biology	3
CHEM 107	General Chemistry I	3
CHEM 108	General Chemistry II	3
CHEM 111	General Chemistry I Lab	1
CHEM 112	General Chemistry II Lab	1
EGEO 131	Oceanography	3
MARS 241	Marine Biology	3
MARS 331	Chemical Oceanography	3
MARS 362	Marine Geology	3
<b>Marine Science Elective</b>		
Choose one 300/400 level MARS course		3
<b>Total Hours</b>		<b>26</b>

- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN MARINE SCIENCE (34D)

This program is effective as of Fall 2003.

Revised 8-2019

## Park & Resource Management, Bachelor of Science (BS)

### PROGRAM LEARNING OUTCOMES

- **Communication:**
  - Students will engage in oral communication
  - Students will produce professional written communication
  - Students will develop graphical and technological communication materials
  - Students will respond to feedback
- **Foundations in Natural Resource Management:**
  - Students will identify flora, fauna, and habitat
  - Students will assess cultural resources
  - Students will practice interpretation
- **Critical Thinking and Problem Solving:**
  - Students will apply an understanding of cultural resource management
  - Students will develop sustainable solutions to global problems
  - Students will evaluate a strategic management plan
- **Professional Leadership and Administration:**
  - Students will provide visitor services to the public
  - Students will identify administrative tasks relevant to PRM
  - Students will lead group projects
  - Students will exhibit professional behavior
- **Career Development and Field Experiences:**
  - Students will create a professional resume
  - Students will demonstrate awareness of job opportunities in the field
  - Students will participate in research
  - Students will participate in experiential learning
  - Students will develop an awareness of the spectrum of job opportunities in the field

## RELATED LINKS

Park and Resource Management, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/park-and-resource-management/>)

Parks and Conservation Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/parks-and-conservation/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### SUMMARY\*

Code	Title	Hours
Rock Studies 2 Requirements		42
Other Basic Requirements		0-3
Computer Competency		0-3
Major Requirements		57
Electives		21

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

#### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15

#### Thematic Thread

Select 12 Credits (p. 29) <sup>2</sup>	12
<b>Total Hours</b>	<b>42</b>

- Course offered in multiple subjects; cannot take course in first major subject.
- One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

### MAJOR REQUIREMENTS

- 29 major credits must be taken at SRU or PASSHE
- 29 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Park &amp; Recreation Core</b>		
PCRM 110	Foundations of Parks and Outdoor Recreation <sup>1</sup>	3
PCRM 111	Introduction to Park and Resource Management <sup>1</sup>	3
PCRM 214	Parks and Recreation Planning <sup>1</sup>	3
PCRM 304	Search and Rescue/Wilderness Medicine <sup>1</sup>	3
PCRM 315	Recreation Resource Planning and Analysis <sup>1</sup>	3
PCRM 347	Interpretive Methods and Programming	3

PCRM 348	Natural History of Ecosystems I <sup>1</sup>	3
PCRM 349	Natural History of Ecosystems II <sup>1</sup>	3
PCRM 351	Parks & Conservation Practicum <sup>1</sup>	3
PCRM 377	Cultural Resources Management <sup>1</sup>	3
PCRM 415	Challenges and Trends in Parks and Conservation <sup>1</sup>	3
PCRM 475	Park and Resource Management <sup>1</sup>	3
PCRM 477	Wildlife & Wildlands Field Methods and Management <sup>1</sup>	3
Subtotal		39
<b>Leadership Course</b>		
Select one of the following:		3
PCRM 211	Outdoor Leadership	
PCRM 318	Administrative Strategies for Resource Managers	
PCRM 342	Group Facilitation and Leadership	
<b>Required Courses Outside of Major Department</b>		
GES 115	Introduction to Geospatial Technologies	3
Subtotal		6
<b>Required Internship</b>		
PCRM 450	Internship <sup>1</sup>	12
<b>Total Hours</b>		<b>57</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## CO-CURRICULAR AND EXPERIENTIAL LEARNING

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term)
2. Student-faculty research
3. Service-learning classes
4. Internships
5. Volunteering
6. Job Shadowing

## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

PARK & RESOURCE MANAGEMENT - BS (6374)

This program is effective as of Fall 2020.

Revised 10.06.20

UCC 09.15.20

## RECOMMENDED FOUR-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
PCRM 110	Foundations of Parks and Outdoor Recreation	3
ENGL 102	Critical Writing	3
ESAP 101	FIRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>13</b>
<b>Spring</b>		
PCRM 111	Introduction to Park and Resource Management	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
SCI 101	Science of Life	3
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
PCRM 210	Resources for Outdoor Programming	3
PCRM 342	Group Facilitation and Leadership	3
GES 115	Introduction to Geospatial Technologies	3
SCI 101	Science of Life	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
PCRM 214	Parks and Recreation Planning	3
PCRM 348	Natural History of Ecosystems I	3
PCRM Leadership Class:		3
PCRM 318	Administrative Strategies for Resource Managers	
PCRM 211	Outdoor Leadership	
PCRM 342	Group Facilitation and Leadership	
Social Science Inquiry (p. 29)		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
PCRM 315	Recreation Resource Planning and Analysis	3
Professional Elective:		3
PCRM 318	Administrative Strategies for Resource Managers	
PCRM 211	Outdoor Leadership	
PCRM 342	Group Facilitation and Leadership	
PCRM 349	Natural History of Ecosystems II	3



PCRM 377	Cultural Resources Management	3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
PCRM 415	Challenges and Trends in Parks and Conservation	3
PCRM 304	Search and Rescue/Wilderness Medicine	3
PCRM 477	Wildlife & Wildlands Field Methods and Management	3
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
PCRM Elective/Minor/Certificate		3
<b>Hours</b>		<b>18</b>
<b>Summer</b>		
PCRM 351	Parks & Conservation Practicum	3
<b>Hours</b>		<b>3</b>
<b>Fourth Year</b>		
<b>Fall</b>		
PCRM 475	Park and Resource Management	3
PCRM 347	Interpretive Methods and Programming	3
PCRM Elective/Minor/Certificate		3
PCRM Elective/Minor/Certificate		3
PCRM Elective/Minor/Certificate		3
<b>Hours</b>		<b>15</b>
<b>Summer</b>		
PCRM 450	Internship	12
<b>Hours</b>		<b>12</b>
<b>Total Hours**</b>		<b>121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

PARK & RESOURCE MANAGEMENT - BS (6374)

Revised: 02.03.2021

## Chemistry

Chair	Secretary	Location	Department Phone
Dr. Susan Zirpoli	Mrs. Anita Culley	272 Advanced Technology and Science Hall	724-738-2031

Department Web Site URL (<https://www.sru.edu/academics/colleges-and-departments/ces/departments/chemistry/>)

Department Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/chemistry-fs.pdf>)

## The Rock Difference

- Prepare students for scientific career opportunities in industry and government.
- Prepare students for graduate study in biotechnology, chemistry, biology, physics, and environmental science
- Prepare students for entrance into schools of medicine, dentistry, veterinary medicine, optometry, nursing, physical therapy, engineering, medical technology, environmental science, pharmacy, and allied public health fields.
- Prepare students to enter the teaching profession in Elementary and Secondary Science Education.

"Slippery Rock was a life-altering experience for me. The chemistry courses I took as a freshman, and great professors, set my life's direction."

**Randy Russell**

Chairman and President of Ranbar Technology, Inc. and Ranbar Electrical Materials, Inc.

## Faculty

**Thaddeus Boron**

Associate Professor

Chemistry

Ph.D., University of Michigan

M.S., University of Michigan

B.S., University of Pittsburgh

**Andre Braz**

Assistant Professor

Chemistry

Ph.D., Universidad de Alcala

M.S., University of Amsterdam

B.S., University of Lisbon

**Qi Chen**

Associate Professor

Chemistry

Ph.D., Auburn University

B.S., East China University of Science & Technology

**David Frohnapfel**

Instructor

Chemistry

Ph.D., University of North Carolina at Chapel Hill

B.S., University of Pittsburgh

**Amanda Hemphill**

Instructor

Chemistry

Ph.D., Purdue University

B.S., Slippery Rock University

**George Lengyel**

Associate Professor

Chemistry

Ph.D., University of Pittsburgh

M.S., University of Pittsburgh

M.A., University of Pittsburgh

B.S., University of Pittsburgh

#### Min Lim

Associate Professor  
Chemistry  
Ph.D., University of Houston  
B.S., Chungnam National University

#### Ashley Loe

Associate Professor  
Chemistry  
Ph.D., University of Kentucky  
B.S., Muskingham University

#### Michael Stapleton

Professor  
Chemistry  
Ph.D., University of Delaware  
B.S., Wilkes College

#### Donald Zapien

Professor  
Chemistry  
Ph.D., University of California at Santa Barbara  
B.S., University of Santa Clara

#### Susan Zirpoli

Assistant Professor  
Chemistry  
Ph.D., Pennsylvania State University  
B.A., Franklin and Marshall College

## Programs majors

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- Chemistry, Bachelor of Science (BS) (p. 370)
- Chemistry, Bachelor of Science (BS) - Concentration in Biochemistry (p. 373)
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- Chemistry, Bachelor of Science (BS) - Concentration in Computational Chemistry (p. 379)
- Chemistry, Bachelor of Science (BS) - Concentration in Environmental Chemistry (p. 383)
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- Chemistry, Bachelor of Science (BS) - Concentration in Health Sciences (p. 390)
- Chemistry, Bachelor of Science (BS) / Pre-Pharmacy (Duquesne) (3+4) (p. 393)
- Chemistry, Bachelor of Science (BS) / Pre-Pharmacy (LECOM) (3+3) (p. 395)
- Chemistry, Bachelor of Science (BS) / Pre-Physician Assistant (SRU) (3+2) (p. 399)
- Chemistry, Pre-Pharmacy (Duquesne) (2+4) (p. 402)

## minors

- Chemistry, Minor (p. 401)

## Courses

### CHEM 104 - Introduction Chemistry I

This course is the first course in a two-semester sequence for non-science majors which introduces the fundamental principles of Chemistry. Although this course serves as a prerequisite for the next course in the sequence (CHEM 106), it is also designed as a stand-alone course. This allows students to take either this course alone or the two-semester sequence and still obtain a basic understanding of chemical principles. The principles of chemistry are developed and illustrated through selective application. Note: This course is not a substitution for CHEM 107 and students cannot receive credit for CHEM 104 and CHEM 107. Also note that this course does not serve as a prerequisite for CHEM 108.

Credits: 3

Term(s) Typically Offered: Offered Every Term

### CHEM 106 - Introductory Chemistry II

This is the second course in a two-semester sequence of an introductory chemistry course for non-science majors. The course will build on the principles presented in CHEM 104 which is a prerequisite for this course and will focus on the areas of organic and biochemistry. As with CHEM 104, this course will concentrate on the basic principles of chemistry and illustrate them through selected applications.

Prerequisites: CHEM 104<sup>C</sup> or CHEM 107<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Winter, Spring&Summer

### CHEM 107 - General Chemistry I

Topics include nomenclature, stoichiometry, kinetic-molecular theory, gas laws, electronic structure, periodicity, and chemical bonding. Stoichiometry is emphasized.

Prerequisites: (ACSD 110<sup>D</sup> or ESAP 110<sup>D</sup>) or MATH 199<sup>D</sup> or minimum score of Y in 'WAIVE ACSD110 W HIGHER MATH' or minimum score of 30 in 'ALEKS PPL Assessment'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Summer Terms

### CHEM 108 - General Chemistry II

Topics include intermolecular forces, solutions, colloids, chemical kinetics, thermodynamics, equilibria (acid-base, solubility, and complex ion), electro-chemistry, and the transition elements.

Prerequisite: CHEM 107<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring & Summer Terms

### CHEM 110 - Contemporary Chemistry Laboratory

Laboratory to accompany Chemistry 104 providing basic chemistry and environmentally related experiences. One two-hour laboratory per week.

Prerequisite: CHEM 104 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offerings Vary

**CHEM 111 - General Chemistry I Lab**

A laboratory to accompany CHEM 107. Laboratory experiments are designed to develop basic laboratory skills and illustrate concepts.

Prerequisite: CHEM 107 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Fall & Summer Terms

**CHEM 112 - General Chemistry II Lab**

A laboratory to accompany CHEM 108. Laboratory experiments illustrate the concepts of General Chemistry II.

Prerequisites: CHEM 107<sup>C</sup> and CHEM 111<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Spring & Summer Terms

**CHEM 113 - Clinical Chemistry Laboratory**

Laboratory to accompany CHEM 103 providing basic chemistry and health-related experiences. One two-hour laboratory per week.

Prerequisite: CHEM 104 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offerings Vary

**CHEM 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**CHEM 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CHEM 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**CHEM 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CHEM 200 - Fundamentals of Organic Chemistry**

A one semester introductory course that covers the most commonly encountered properties of the major families of organic compounds. The course is designed for students pursuing a B.S. in environmental science. Not equivalent to CHEM 201.

Prerequisites: CHEM 108<sup>C</sup> and CHEM 112<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Summer & Winter Terms

**CHEM 201 - Organic Chemistry I**

Modern theories relating molecular structure to chemical reactivity are stressed. Elucidation of molecular structure by infrared, ultraviolet, nuclear magnetic resonance and mass spectroscopy is also covered.

Prerequisites: CHEM 108<sup>C</sup> and CHEM 112<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Summer Terms

**CHEM 202 - Organic Chemistry II**

Modern theories relating molecular structure to chemical reactivity are stressed. Elucidation of molecular structure by infrared, ultraviolet, nuclear magnetic resonance and mass spectroscopy is also covered.

Prerequisite: CHEM 201<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring & Summer Terms

**CHEM 204 - Introduction to Forensic Science**

Forensic science is the application of science to the examination of physical evidence obtained in the investigation of a crime. The Introduction to Forensic Science course uses high impact practices to provide an immersed research experience for students in the different steps of the scientific method, while learning about the multidisciplinary and interdisciplinary nature of Forensic Science.

Credits: 3

Thematic Thread(s): Citizenship & Social Problems, Institutions & Human Innovations, Transfer Thread Completion Course

**CHEM 211 - Organic Chemistry Laboratory I**

A laboratory course in which students employ the synthetic techniques and analytical procedures of organic chemistry.

Prerequisites: CHEM 112<sup>C</sup> and CHEM 201<sup>\*C</sup> and CHEM 108<sup>C</sup> (may be taken concurrently).

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall & Summer Terms

**CHEM 212 - Organic Chemistry Laboratory II**

A laboratory course in which students employ the synthetic techniques and analytical procedures of organic chemistry.

Prerequisites: CHEM 201<sup>C</sup> and CHEM 211<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Spring & Summer Terms

**CHEM 240 - Industrial Hygiene**

Requirements to preserve worker health and safety will be surveyed.

Prerequisites: CHEM 108<sup>D</sup> and (CHEM 200<sup>D</sup> or CHEM 201<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

**CHEM 243 - Introduction to Research in Chemistry**

This is a one semester seminar covering faculty research within the chemistry department, use of library resources, internship opportunities available to undergraduate students, and basic safety training. This course is intended primarily for first-semester sophomore chemistry majors but is open to students from other majors in CHES who might be interested in pursuing undergraduate research in chemistry.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with a semester level of Junior 1, Junior 2, Sophomore 1 or Sophomore 2.

Enrollment limited to students in the College of Engineering & Science college.

**CHEM 270 - Industrial Chemistry**

A study of industries with emphasis on economic, technical, and possible ecological factors affecting process design. Includes on-site lectures and discussions of various industries in the area.

Prerequisites: CHEM 108<sup>D</sup> and CHEM 112<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

**CHEM 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CHEM 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**CHEM 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CHEM 301 - Physical Chemistry I**

Thermodynamics and chemical kinetics. Cross listed as PHYS301.

Prerequisites: CHEM 108<sup>C</sup> and CHEM 112<sup>C</sup> and (PHYS 212<sup>C</sup> or PHYS 213<sup>C</sup>) and MATH 230<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 302 - Physical Chemistry II**

Quantum mechanics and spectroscopy.

Prerequisites: MATH 230<sup>C</sup> and CHEM 108<sup>C</sup> and CHEM 112<sup>C</sup> and PHYS 211<sup>C</sup> and (PHYS 212<sup>C</sup> or PHYS 213<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 321 - Physical Chemistry Laboratory I**

Principles from Thermodynamic principles will be employed in the laboratory for determining and relating physical properties such as viscosity, surface tension, boiling and freezing points to the identity, and composition of chemical substances.

Prerequisites: CHEM 301 (may be taken concurrently)<sup>D</sup> or PHYS 301 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 322 - Physical Chemistry Laboratory II**

Applied principles from Physical Chemistry II lecture will be used for interpreting results from experiments involving kinetics, equilibria, and spectrophotometric data.

Prerequisite: CHEM 302 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 335 - Biochemistry I**

The study of structures and physical properties of biological molecules.

Prerequisites: BIOL 104<sup>C</sup> and CHEM 202<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 336 - Biochemistry Laboratory I**

A laboratory course in which the student uses techniques employed in biochemical investigations.

Prerequisites: CHEM 335 (may be taken concurrently)<sup>C</sup> and CHEM 212<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 337 - Biochemistry II**

Investigates the basic theme of intermediary metabolism. A background for this study is gained through study of the chemistry of cellular constituents.

Prerequisites: CHEM 335<sup>C</sup> and CHEM 336<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 338 - Biochemistry Laboratory II**

This is a one-credit course in biochemical techniques used in the investigation, isolation and purification of biomolecules. The student will get an exposure to and an appreciation for problem solving utilizing a research-oriented approach.

Prerequisites: CHEM 336<sup>C</sup> and CHEM 337<sup>\*C</sup> (may be taken concurrently).

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 340 - Air Quality Assessment**

A study of the quality of the air environment. Air quality assessment and potential problems will be examined both in lecture discussions and in laboratory or field situations. (Includes ambient air testing.) Three hours of lecture and three hours of laboratory per week.

Prerequisites: CHEM 200<sup>C</sup> or CHEM 201<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 4

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 350 - Analytical Chemistry**

Topics include gravimetric and volumetric analysis of chemical systems. Special emphasis is given to titrimetric methods based on acid-base, complexation, and oxidation-reduction reactions.

Prerequisites: CHEM 108<sup>C</sup> and CHEM 112<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 351 - Analytical Chemistry Lab**

Students develop practical skills employed in the quantitative analysis of chemical systems.

Prerequisites: CHEM 350 (may be taken concurrently)<sup>C</sup> and CHEM 108<sup>C</sup> and CHEM 112<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 370 - Water Quality Assessment**

Water quality assessment and water quality problems will be examined both in lecture discussions and in laboratory or field situations. Three hours of lecture and three hours of laboratory per week.

Prerequisites: CHEM 200<sup>C</sup> or CHEM 201<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 4

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 415 - Forensic Analysis**

The application of analytical chemistry including instrumental methods to the investigation and interpretation of crime scene evidence.

Prerequisites: CHEM 350<sup>C</sup> and CHEM 351<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 416 - Forensic Analysis Lab**

The application of instrumental methods of analysis to the interpretation of crime scene evidence.

Prerequisites: CHEM 350<sup>C</sup> and CHEM 351<sup>C</sup> and CHEM 415<sup>\*C</sup> (may be taken concurrently).

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**CHEM 425 - Instrumental Analysis**

A lecture course to introduce the student to the theory, advantages, disadvantages, limitations, and power of contemporary chemical instrumentation, including computational methods.

Prerequisites: CHEM 350<sup>C</sup> and MATH 225<sup>C</sup> and PHYS 211<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 426 - Instrumental Analysis Laboratory**

A three hour per week laboratory accompanying CHEM 425.

Instrumentation and computing technology will be applied to quantitative problems of chemistry.

Prerequisite: CHEM 425 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 430 - Industrial Pollution Control Engineering**

Economic and technical problems will be discussed as related to the abatement of harmful discharges from industrial sources. Systems analysis will be employed in the examination of engineering solutions in the physical or chemical treatment of discharge. Three hours of lecture per week or a field trip.

Prerequisites: CHEM 108<sup>D</sup> and CHEM 112<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 442 - Inorganic Chemistry**

A lecture course covering atomic structure, bonding, and properties of inorganic compounds. Coordination chemistry and other topics of current research interest are covered. Offered in alternate years.

Prerequisite: CHEM 202<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 450 - Chemistry Internship**

Supervised placement and research in selected public and private agencies. (Credits earned will be counted as free electives and will not be counted toward the chemistry major.)

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 452 - Physical Inorganic Chemistry Laboratory**

A laboratory course illustrating techniques of synthesis and characterization of inorganic compounds using a variety of spectroscopic and magnetic measurements, and using computational chemistry methods to investigate the electronic structure of compounds.

Prerequisites: CHEM 212<sup>C</sup> and CHEM 442<sup>\*C</sup> (may be taken concurrently).

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 460 - Materials Chemistry**

A one semester introductory course that covers the synthesis, analysis, and properties of polymers and solid state materials. Applications to industrial and practical application will be discussed.

Prerequisite: CHEM 202<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 475 - Advanced Organic Synthesis**

A one semester course that includes an advanced organic chemistry synthesis laboratory. The lecture part covers modern synthetically useful reactions and their applications. The intensive laboratory offers the students an introduction to organic synthesis research, including the use of modern reagents and instruments. Students will become acquainted with techniques of preparation, purification and spectroscopic identifications of organic compounds.

Prerequisites: CHEM 202<sup>C</sup> and CHEM 212<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 4

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 490 - Independent Study**

Independent Study courses offer a student the opportunity to carry out original, chemical research in a Chemistry Department, employing all facilities available through the department. Students must properly write and submit an ACS-style report to their faculty advisor or department chair for evaluation.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 491 - Chemistry Seminar**

For junior chemistry majors. On-line searches of the chemical literature lead to oral presentations and written reports in a selected area of research.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 496 - Research**

Offers a student the opportunity to carry out chemical research in the laboratory, employing all departmental facilities, and the experience of writing a thesis under the direction of a faculty mentor.

Credits: 1-3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Chemistry, Bachelor of Arts (BA)

### Program Learning Outcomes

- Students will demonstrate knowledge of the main disciplines of chemistry, namely *Organic, Analytical, Biological, Physical, and Inorganic* chemistry.
- Students will demonstrate development of technical skills for practical applications of chemistry.
- Students will present collected experimental data in written and oral reports.
- Students and faculty will participate in faculty-led research projects. Students are expected to be actively working in the laboratory under the supervision and guidance of a faculty mentor.

### Related Links

Chemistry, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/chemistry-ba/>)

Chemistry Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/chemistry/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Modern Language Requirement	0-9
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	40
	Natural Science and Math College-Wide Requirements	12
	Electives	35

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 225	Calculus I <sup>2</sup>	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16

#### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I <sup>2</sup>	3
CHEM 111	General Chemistry I Lab	1
<i>Physical Sciences Inquiry</i>		
PHYS 216	University Physics 1 with Lab	4
Subtotal		17

#### Thematic Thread

Select 12 Credits (p. 29) <sup>3</sup>		12
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<b>Total Hours</b>		<b>45</b>
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<sup>1</sup> Course offered in multiple subjects; cannot take in first major subject

<sup>2</sup> Course counts for 50% of Major requirements and Major GPA

<sup>3</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
Complete 0-9 credits		0-9
<b>Total Hours</b>		<b>0-9</b>

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- 20 major credits must be taken at SRU or PASSHE
- 20 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Chemistry Courses</b>		
CHEM 108	General Chemistry II <sup>1</sup>	3
CHEM 112	General Chemistry II Lab <sup>1</sup>	1
CHEM 201	Organic Chemistry I <sup>1</sup>	3
CHEM 211	Organic Chemistry Laboratory I <sup>1</sup>	1
CHEM 202	Organic Chemistry II <sup>1</sup>	3
CHEM 212	Organic Chemistry Laboratory II <sup>1</sup>	1
CHEM 301	Physical Chemistry I <sup>1</sup>	3
CHEM 321	Physical Chemistry Laboratory I <sup>1</sup>	1
CHEM 335	Biochemistry I <sup>1</sup>	3
CHEM 336	Biochemistry Laboratory I <sup>1</sup>	1
CHEM 350	Analytical Chemistry <sup>1</sup>	3
CHEM 351	Analytical Chemistry Lab <sup>1</sup>	1

CHEM 442	Inorganic Chemistry <sup>1</sup>	3
CHEM 452	Physical Inorganic Chemistry Laboratory <sup>1</sup>	1
<b>Subtotal</b>		<b>28</b>

### Chemistry Elective

Select four credits (must include one lecture and one lab):		4
CHEM 337	Biochemistry II <sup>1</sup>	
CHEM 338	Biochemistry Laboratory II <sup>1</sup>	
CHEM 340	Air Quality Assessment <sup>1</sup>	
CHEM 370	Water Quality Assessment <sup>1</sup>	
CHEM 425	Instrumental Analysis <sup>1</sup>	
CHEM 426	Instrumental Analysis Laboratory <sup>1</sup>	
CHEM 460	Materials Chemistry <sup>1</sup>	
CHEM 475	Advanced Organic Synthesis <sup>1</sup>	
CHEM 490	Independent Study <sup>1</sup>	
<b>Subtotal</b>		<b>4</b>

### Required Math and Science Courses

MATH 230	Calculus II <sup>1</sup>	4
PHYS 217	University Physics 2 with Lab <sup>1</sup>	4
<b>Subtotal</b>		<b>8</b>
<b>Total Hours</b>		<b>40</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
CHEM 107	General Chemistry I <sup>1</sup>	3
CHEM 111	General Chemistry I Lab <sup>1</sup>	1
PHYS 201	Elements of Physics I with Lab <sup>1</sup>	4
or PHYS 216	University Physics 1 with Lab	
MATH 125	Precalculus <sup>1</sup>	4
or MATH 225	Calculus I	

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes (e.g., Organic Chemistry II Lab)
2. Student-faculty research
3. Student leadership development (Chemistry Club)
4. Career education and development
5. Internships
6. Student teaching (serve as Lab Assistants and tutors)
7. Volunteering

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-

earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

CHEMISTRY - BA (6 12)

This program is effective as of Fall 2021

Revised 07.29.2021

UCC 04.13.2021

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
Select one of the following:		3-4
MATH 120	Intermediate Algebra (if necessary)	
MATH 125	Precalculus (if necessary)	
MATH 225	Calculus I (if necessary)	
MATH 230	Calculus II	
BIOL 104		4
ESAP 101	FIRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>15-16</b>
<b>Spring</b>		
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
Select one of the following:		4
MATH 125	Precalculus (if necessary)	
MATH 225	Calculus I (if necessary)	
MATH 230	Calculus II	
ENGL 102	Critical Writing	3
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>14</b>
<b>Second Year</b>		
<b>Fall</b>		
CHEM 201 & CHEM 211	Organic Chemistry I and Organic Chemistry Laboratory I	4
CHEM 243	Introduction to Research in Chemistry	1
Select one of the following:		4
MATH 225	Calculus I (if necessary)	
MATH 230	Calculus II	
PHYS 216	University Physics 1 with Lab	4
ENGL 104	Critical Reading	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
CHEM 202 & CHEM 212	Organic Chemistry II and Organic Chemistry Laboratory II	4
MATH 230	Calculus II	4
PHYS 217	University Physics 2 with Lab	4

Civil Discourse Requirement - select one		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>18</b>

### Third Year

#### Fall

CHEM 335 & CHEM 336	Biochemistry I and Biochemistry Laboratory I	4
CHEM 350 & CHEM 351	Analytical Chemistry and Analytical Chemistry Lab	4
Inquiry/Thread/Elective Course		3
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>14</b>

#### Spring

Select one of the following In Depth Chemistry Electives (1 lecture and 1 lab):		4
CHEM 337 & CHEM 338	Biochemistry II and Biochemistry Laboratory II	
CHEM 340	Air Quality Assessment	
CHEM 370	Water Quality Assessment	
CHEM 415 & CHEM 416	Forensic Analysis and Forensic Analysis Lab	
CHEM 460	Materials Chemistry	
CHEM 475	Advanced Organic Synthesis	
CHEM 490	Independent Study	
Inquiry/Thread/Elective Course		3
Inquiry/Thread/Elective Course		3
Inquiry/Thread/Elective Course		3
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>16</b>

### Fourth Year

#### Fall

CHEM 301 & CHEM 321	Physical Chemistry 1 and Physical Chemistry Laboratory I	4
CHEM 442	Inorganic Chemistry	3
Inquiry/Thread/Elective Course		3
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>13</b>

#### Spring

CHEM 452	Physical Inorganic Chemistry Laboratory	1
Inquiry/Thread/Elective Course		3
Inquiry/Thread/Elective Course		3
Inquiry/Thread/Elective Course		3
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>13</b>
<b>Total Hours**</b>		<b>119-120</b>

<sup>1</sup> Course offered in multiple subjects; cannot take in first major subject

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing

*courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

Major Code: 6 12

Revised date: 08.02.2021

## Chemistry, Bachelor of Science (BS)

The Slippery Rock University Chemistry Degree is certified by the American Chemistry Society or ACS. In order to earn ACS certification, students must complete 2 credits of Independent Study and 1 credit of Research in addition to the BS requirements. Students can also choose an option concentration in order to broaden their background in chemistry or to gain additional experience if they wish to pursue other interests.

Concentrations are available in the following areas:

- Biochemistry
- Computational Chemistry
- Education
- Environmental Chemistry
- Forensic Chemistry
- Health Sciences

## Program Learning Outcomes

- Students will demonstrate knowledge of the main disciplines of chemistry, namely Organic, Analytical, Biological, Physical, and Inorganic chemistry.
- Students will demonstrate development of technical skills for practical applications of chemistry.
- Students will present collected experimental data in written and oral reports.
- Students and faculty will participate in faculty-led research projects. Students are expected to be actively working in the laboratory under the supervision and guidance of a faculty mentor.

## Related Links

Chemistry, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/chemistry-bs/>)

Chemistry Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/chemistry/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Other Basic Requirements	0-3
	Computer Competency	0-3

Major/Concentration Requirements	54
Natural Science and Mathematics College Wide Requirement	12
ACS Certification – Optional	0-3
Electives	21

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 225	Calculus I <sup>2,3</sup>	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	4
& CHEM 111	and General Chemistry I Lab <sup>2,3</sup>	
<i>Physical Sciences Inquiry</i>		
PHYS 216	University Physics 1 with Lab <sup>2,3</sup>	4
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>4</sup>		12
<b>Total Hours</b>		<b>45</b>

<sup>1</sup> Course offered in multiple subjects; cannot take in first major subject

<sup>2</sup> Course counts for 50% of Major requirements and Major GPA

<sup>3</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

<sup>4</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.



Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	

**Total Hours** **0-3**

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		

CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	

**Total Hours** **0-3**

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- 27 major credits must be taken at SRU or PASSHE
- 27 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Introductory Chemistry Courses</b>		
CHEM 108	General Chemistry II <sup>1,2</sup>	3
CHEM 112	General Chemistry II Lab <sup>1</sup>	1
Subtotal		4

<b>Required Foundation Chemistry Courses</b>		
CHEM 201	Organic Chemistry I <sup>1,2</sup>	3
CHEM 211	Organic Chemistry Laboratory I <sup>1</sup>	1
CHEM 301	Physical Chemistry I <sup>1</sup>	3
CHEM 321	Physical Chemistry Laboratory I <sup>1</sup>	1
CHEM 335	Biochemistry I <sup>1</sup>	3
CHEM 336	Biochemistry Laboratory I <sup>1</sup>	1
CHEM 350	Analytical Chemistry <sup>1</sup>	3
CHEM 351	Analytical Chemistry Lab <sup>1</sup>	1
CHEM 442	Inorganic Chemistry <sup>1</sup>	3
CHEM 452	Physical Inorganic Chemistry Laboratory <sup>1</sup>	1
Subtotal		20

<b>Required In-Depth Chemistry Courses</b>		
CHEM 202	Organic Chemistry II <sup>1,2</sup>	3
CHEM 212	Organic Chemistry Laboratory II <sup>1</sup>	1
CHEM 302	Physical Chemistry II <sup>1</sup>	3
CHEM 425	Instrumental Analysis <sup>1</sup>	3
CHEM 426	Instrumental Analysis Laboratory <sup>1</sup>	1
CHEM 460	Materials Chemistry <sup>1</sup>	3
Subtotal		14

## Additional Required In-Depth Chemistry Courses

Select one lecture and one laboratory course:		4
CHEM 337	Biochemistry II <sup>1</sup>	
CHEM 338	Biochemistry Laboratory II <sup>1</sup>	
CHEM 340	Air Quality Assessment <sup>1</sup>	
CHEM 370	Water Quality Assessment <sup>1</sup>	
CHEM 415	Forensic Analysis <sup>1</sup>	
CHEM 416	Forensic Analysis Lab <sup>1</sup>	
CHEM 475	Advanced Organic Synthesis <sup>1</sup>	
Subtotal		4

## Cognate Courses

BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab <sup>1</sup>	4
MATH 230	Calculus II <sup>1,3</sup>	4
PHYS 217	University Physics 2 with Lab <sup>1</sup>	4
Subtotal		12
<b>Total Hours</b>		<b>54</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> A 'C' or better must be earned in course to register for Chemistry courses 300 or above.

<sup>3</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Natural Science and Math College-Wide Requirement

Code	Title	Hours
CHEM 107	General Chemistry I <sup>1,2</sup>	3
CHEM 111	General Chemistry I Lab <sup>1</sup>	1
MATH 225	Calculus I <sup>1,3</sup>	4
PHYS 216	University Physics 1 with Lab	4
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> A 'C' or better must be earned in course to register for Chemistry courses 300 or above.

<sup>3</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

## ACS Certification – Optional

Code	Title	Hours
CHEM 490	Independent Study <sup>1</sup>	2
CHEM 496	Research <sup>1</sup>	1
<b>Total Hours</b>		<b>3</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes (e.g., Organic Chemistry II Lab)
2. Student-faculty research
3. Student leadership development (Chemistry Club)
4. Career education and development
5. Internships
6. Student teaching (serve as Lab Assistants and tutors)
7. Volunteering

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

CHEMISTRY - BS (6118)

This program is effective as of Summer 2022

Revised 07.06.2022

UCC 03.22.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
Select one of the following:		3-4
MATH 120	Intermediate Algebra (if necessary)	
MATH 125	Precalculus (if necessary)	
MATH 225	Calculus I (if necessary)	
MATH 230	Calculus II	
BIOL 104		4
ESAP 101	FIRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>15-16</b>
<b>Spring</b>		
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
Select one of the following:		4
MATH 125	Precalculus (if necessary)	
MATH 225	Calculus I (if necessary)	
MATH 230	Calculus II	
ENGL 102	Critical Writing	3
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>14</b>
<b>Second Year</b>		
<b>Fall</b>		
CHEM 201 & CHEM 211	Organic Chemistry I and Organic Chemistry Laboratory I	4

CHEM 243	Introduction to Research in Chemistry	1
Select one of the following:		4
MATH 225	Calculus I (if necessary)	
MATH 230	Calculus II	
PHYS 216	University Physics 1 with Lab	4
ENGL 104	Critical Reading	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
CHEM 202 & CHEM 212	Organic Chemistry II and Organic Chemistry Laboratory II	4
MATH 230	Calculus II (if necessary)	4
PHYS 217	University Physics 2 with Lab	4
Civil Discourse Requirement - select one		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>18</b>

### Third Year

#### Fall

CHEM 335 & CHEM 336	Biochemistry I and Biochemistry Laboratory I	4
CHEM 350 & CHEM 351	Analytical Chemistry and Analytical Chemistry Lab	4
Inquiry/Thread/Elective Course		3
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>14</b>

#### Spring

Select one of the following:		3
CHEM 302	Physical Chemistry II (even years)	
CHEM 460	Materials Chemistry (odd years)	
CHEM 425 & CHEM 426	Instrumental Analysis and Instrumental Analysis Laboratory	4
CHEM 491	Chemistry Seminar	1
Select one of the following In Depth Chemistry Elective (1 lecture and 1 lab):		4
CHEM 337 & CHEM 338	Biochemistry II and Biochemistry Laboratory II	
CHEM 340	Air Quality Assessment (even years)	
CHEM 370	Water Quality Assessment (odd years)	
CHEM 415 & CHEM 416	Forensic Analysis and Forensic Analysis Lab	
CHEM 475	Advanced Organic Synthesis	
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>15</b>

### Fourth Year

#### Fall

CHEM 301 & CHEM 321	Physical Chemistry 1 and Physical Chemistry Laboratory I	4
CHEM 442	Inorganic Chemistry	3
Inquiry/Thread/Elective Course		3
Inquiry/Thread/Elective Course		3

Inquiry/Thread/Elective Course	3
<b>Hours</b>	<b>16</b>
<b>Spring</b>	
Select one of the following:	3
CHEM 302 Physical Chemistry II (even years)	
CHEM 460 Materials Chemistry (odd years)	
CHEM 452 Physical Inorganic Chemistry Laboratory	1
Inquiry/Thread/Elective Course	3
Inquiry/Thread/Elective Course	3
Inquiry/Thread/Elective Course	3
<b>Hours</b>	<b>13</b>
<b>Total Hours**</b>	<b>121-122</b>

<sup>1</sup> Course offered in multiple subjects; cannot take in first major subject

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

Optional ACS Certification requires 2 credits of CHEM 490: Independent Study and 1 credit of CHEM 496: Research.

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

Major Code: 6118

Revised date: 08.02.2021

## Chemistry, Bachelor of Science (BS) - Concentration in Biochemistry

The Slippery Rock University Chemistry Degree is certified by the American Chemistry Society or ACS. In order to earn ACS certification, students must complete 2 credits of Independent Study and 1 credit of Research in addition to the BS requirements. Students can also choose an option concentration in order to broaden their background in chemistry or to gain additional experience if they wish to pursue other interests.

Concentrations are available in the following areas:

- Biochemistry
- Computational Chemistry
- Education
- Environmental Chemistry
- Forensic Chemistry
- Health Sciences

## Program Learning Outcomes

- Students will demonstrate knowledge of the main disciplines of chemistry, namely *Organic, Analytical, Biological, Physical, and Inorganic* chemistry.
- Students will demonstrate development of technical skills for practical applications of chemistry.

- Students will present collected experimental data in written and oral reports.

- Students and faculty will participate in faculty-led research projects. Students are expected to be actively working in the laboratory under the supervision and guidance of a faculty mentor.

## Related Links

Chemistry - Biochemistry, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/chemistry-biochemistry/>)

Chemistry Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/chemistry/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	54
	Natural Science and Math College-Wide Requirements	12
	Biochemistry Concentration	14
	ACS Certification – Optional	0-3
	Electives	7

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 225	Calculus I <sup>2,3</sup>	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16

### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		

CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab <sup>2,3</sup>	4
<i>Physical Sciences Inquiry</i>		
PHYS 216	University Physics 1 with Lab <sup>2,3</sup>	4
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>4</sup>		12
<b>Total Hours</b>		<b>45</b>

- <sup>1</sup> Course offered in multiple subjects; cannot take in first major subject
- <sup>2</sup> Course counts for 50% of Major requirements and Major GPA
- <sup>3</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.
- <sup>4</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- 27 major credits must be taken at SRU or PASSHE
- 27 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Introductory Chemistry Courses</b>		
CHEM 108	General Chemistry II <sup>1</sup>	3
CHEM 112	General Chemistry II Lab <sup>1</sup>	1
Subtotal		4
<b>Required Foundation Chemistry Courses</b>		
CHEM 201	Organic Chemistry I <sup>1</sup>	3
CHEM 211	Organic Chemistry Laboratory I <sup>1</sup>	1
CHEM 301	Physical Chemistry I <sup>1</sup>	3
CHEM 321	Physical Chemistry Laboratory I <sup>1</sup>	1
CHEM 335	Biochemistry I <sup>1</sup>	3
CHEM 336	Biochemistry Laboratory I <sup>1</sup>	1
CHEM 350	Analytical Chemistry <sup>1</sup>	3
CHEM 351	Analytical Chemistry Lab <sup>1</sup>	1
CHEM 442	Inorganic Chemistry <sup>1</sup>	3
CHEM 452	Physical Inorganic Chemistry Laboratory <sup>1</sup>	1
Subtotal		20
<b>Required In-Depth Chemistry Courses</b>		
CHEM 202	Organic Chemistry II <sup>1</sup>	3
CHEM 212	Organic Chemistry Laboratory II <sup>1</sup>	1
CHEM 302	Physical Chemistry II <sup>1</sup>	3
CHEM 425	Instrumental Analysis <sup>1</sup>	3
CHEM 426	Instrumental Analysis Laboratory <sup>1</sup>	1
CHEM 460	Materials Chemistry <sup>1</sup>	3
Subtotal		14
<b>Additional Required In-Depth Chemistry Courses</b>		
Select one lecture and one laboratory course:		4
CHEM 337	Biochemistry II <sup>1</sup>	
CHEM 338	Biochemistry Laboratory II <sup>1</sup>	
CHEM 340	Air Quality Assessment <sup>1</sup>	
CHEM 370	Water Quality Assessment <sup>1</sup>	
CHEM 415	Forensic Analysis <sup>1</sup>	
CHEM 416	Forensic Analysis Lab <sup>1</sup>	
CHEM 475	Advanced Organic Synthesis <sup>1</sup>	
Subtotal		4
<b>Cognate Courses</b>		
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab <sup>1</sup>	4
MATH 230	Calculus II <sup>1</sup>	4
PHYS 217	University Physics 2 with Lab <sup>1</sup>	4
Subtotal		12
<b>Total Hours</b>		<b>54</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
CHEM 107	General Chemistry I <sup>1</sup>	3
CHEM 111	General Chemistry I Lab <sup>1</sup>	1

MATH 225	Calculus I <sup>1,2</sup>	4
PHYS 216	University Physics 1 with Lab <sup>1,2</sup>	4

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

## Biochemistry Concentration

Code	Title	Hours
CHEM 337	Biochemistry II <sup>1</sup>	3
CHEM 338	Biochemistry Laboratory II <sup>1</sup>	1
BIOL 250	Genetics with Lab <sup>1</sup>	4
BIOL 335	Cell Biology/Lab <sup>1</sup>	3
BIOL 370	Molecular Biology with Lab <sup>1</sup>	3
<b>Total Hours</b>		<b>14</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

## ACS Certification – Optional

Code	Title	Hours
CHEM 490	Independent Study <sup>1</sup>	2
CHEM 496	Research <sup>1</sup>	1
<b>Total Hours</b>		<b>3</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes (e.g., Organic Chemistry II Lab)
2. Student-faculty research
3. Student leadership development (Chemistry Club)
4. Career education and development
5. Internships
6. Student teaching (serve as Lab Assistants and tutors)
7. Volunteering

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

CHEMISTRY - BS (6118)

Concentration in Biochemistry (BCHM)

This program is effective as of Summer 2022

Revised 07.06.2022

UCC 03.22.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
Select one of the following:		3-4
MATH 120	Intermediate Algebra (if necessary)	
MATH 125	Precalculus (if necessary)	
MATH 225	Calculus I (if necessary)	
MATH 230	Calculus II	
BIOL 104		4
ESAP 101	FIRST Seminar <sup>2</sup>	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>15-16</b>
<b>Spring</b>		
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
Select one of the following:		4
MATH 125	Precalculus (if necessary)	
MATH 225	Calculus I (if necessary)	
MATH 230	Calculus II	
ENGL 102	Critical Writing	3
BIOL 250	Genetics with Lab	4
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
CHEM 201 & CHEM 211	Organic Chemistry I and Organic Chemistry Laboratory I	4
CHEM 243	Introduction to Research in Chemistry	1
Select one of the following:		4
MATH 225	Calculus I	
MATH 230	Calculus II (if necessary)	
PHYS 216	University Physics 1 with Lab	4
ENGL 104	Critical Reading	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
CHEM 202 & CHEM 212	Organic Chemistry II and Organic Chemistry Laboratory II	4
MATH 230	Calculus II	4
PHYS 217	University Physics 2 with Lab	4
Civil Discourse Requirement - select one		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>18</b>
<b>Third Year</b>		
<b>Fall</b>		
CHEM 335 & CHEM 336	Biochemistry I and Biochemistry Laboratory I	4



CHEM 350 & CHEM 351	Analytical Chemistry and Analytical Chemistry Lab	4
BIOL 370	Molecular Biology with Lab	3
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
Select one of the following:		3
CHEM 302	Physical Chemistry II (even years)	
CHEM 460	Materials Chemistry (odd years)	
CHEM 337 & CHEM 338	Biochemistry II and Biochemistry Laboratory II	4
CHEM 425 & CHEM 426	Instrumental Analysis and Instrumental Analysis Laboratory	4
CHEM 491	Chemistry Seminar	1
BIOL 335	Cell Biology/Lab	3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
CHEM 301 & CHEM 321	Physical Chemistry I and Physical Chemistry Laboratory I	4
CHEM 442	Inorganic Chemistry	3
Inquiry/Thread/Elective Course		3
Inquiry/Thread/Elective Course		3
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Select one of the following:		3
CHEM 302	Physical Chemistry II (even years)	
CHEM 460	Materials Chemistry (odd years)	
CHEM 452	Physical Inorganic Chemistry Laboratory	1
Inquiry/Thread/Elective Course		3
Inquiry/Thread/Elective Course		3
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>13</b>
<b>Total Hours**</b>		<b>122-123</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> Students are encouraged to take ESAP 101 as a Free Elective.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

Optional ACS Certification requires 2 credits of CHEM 490: Independent Study and 1 credit of CHEM 496: Research.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6118  
Concentration: BCHM  
Revised date: 08.02.2021

## Chemistry, Bachelor of Science (BS) - Concentration in Chemistry Education

The Slippery Rock University Chemistry Degree is certified by the American Chemistry Society or ACS. In order to earn ACS certification, students must complete 2 credits of Independent Study and 1 credit of Research in addition to the BS requirements. Students can also choose an option concentration in order to broaden their background in chemistry or to gain additional experience if they wish to pursue other interests.

Concentrations are available in the following areas:

- Biochemistry
- Computational Chemistry
- Education
- Environmental Chemistry
- Forensic Chemistry
- Health Sciences

## Program Learning Outcomes

- Students will demonstrate knowledge of the main disciplines of chemistry, namely *Organic, Analytical, Biological, Physical, and Inorganic* chemistry.
- Students will demonstrate development of technical skills for practical applications of chemistry.
- Students will present collected experimental data in written and oral reports.
- Students and faculty will participate in faculty-led research projects. Students are expected to be actively working in the laboratory under the supervision and guidance of a faculty mentor.

## Related Links

Chemistry - Chemistry Education, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/chemistry-education-x33578/>)

Chemistry Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/chemistry/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher  
Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	54
	Natural Science and Math College-Wide Requirements	12
	Chemistry Education Concentration	13

ACS Certification – Optional	0-3
<b>Electives</b>	<b>8</b>

\* All undergraduate degree programs require a minimum of 120 credits.  
Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 225	Calculus I <sup>2,3</sup>	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
<b>Subtotal</b>		<b>16</b>
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab <sup>2,3</sup>	4
<i>Physical Sciences Inquiry</i>		
PHYS 216	University Physics 1 with Lab <sup>2,3</sup>	4
<b>Subtotal</b>		<b>17</b>
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>4</sup>		12
<b>Total Hours</b>		<b>45</b>

<sup>1</sup> Course offered in multiple subjects; cannot take in first major subject

<sup>2</sup> Course counts for 50% of Major requirements and Major GPA

<sup>3</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

<sup>4</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		

ESAP 110	Beginning Algebra
<b>Total Hours</b>	<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- 27 major credits must be taken at SRU or PASSHE
- 27 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Introductory Chemistry Courses</b>		
CHEM 108	General Chemistry II <sup>1</sup>	3
CHEM 112	General Chemistry II Lab <sup>1</sup>	1
<b>Subtotal</b>		<b>4</b>
<b>Required Foundation Chemistry Courses</b>		
CHEM 201	Organic Chemistry I <sup>1</sup>	3
CHEM 211	Organic Chemistry Laboratory I <sup>1</sup>	1
CHEM 301	Physical Chemistry I <sup>1</sup>	3
CHEM 321	Physical Chemistry Laboratory I <sup>1</sup>	1
CHEM 335	Biochemistry I <sup>1</sup>	3
CHEM 336	Biochemistry Laboratory I <sup>1</sup>	1
CHEM 350	Analytical Chemistry <sup>1</sup>	3
CHEM 351	Analytical Chemistry Lab <sup>1</sup>	1
CHEM 442	Inorganic Chemistry <sup>1</sup>	3
CHEM 452	Physical Inorganic Chemistry Laboratory <sup>1</sup>	1
<b>Subtotal</b>		<b>20</b>
<b>Required In-Depth Chemistry Courses</b>		
CHEM 202	Organic Chemistry II <sup>1</sup>	3
CHEM 212	Organic Chemistry Laboratory II <sup>1</sup>	1
CHEM 302	Physical Chemistry II <sup>1</sup>	3
CHEM 425	Instrumental Analysis <sup>1</sup>	3
CHEM 426	Instrumental Analysis Laboratory <sup>1</sup>	1
CHEM 460	Materials Chemistry <sup>1</sup>	3
<b>Subtotal</b>		<b>14</b>

### Additional Required In-Depth Chemistry Courses

Select one lecture and one laboratory course:		4
CHEM 337	Biochemistry II <sup>1</sup>	

CHEM 338	Biochemistry Laboratory II <sup>1</sup>	
CHEM 340	Air Quality Assessment <sup>1</sup>	
CHEM 370	Water Quality Assessment <sup>1</sup>	
CHEM 415	Forensic Analysis <sup>1</sup>	
CHEM 416	Forensic Analysis Lab <sup>1</sup>	
CHEM 475	Advanced Organic Synthesis <sup>1</sup>	
Subtotal		4
<b>Cognate Courses</b>		
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab <sup>1</sup>	4
MATH 230	Calculus II <sup>1</sup>	4
PHYS 217	University Physics 2 with Lab <sup>1</sup>	4
Subtotal		12
<b>Total Hours</b>		<b>54</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Natural Science and Math College Wide Requirements

Code	Title	Hours
CHEM 107	General Chemistry I <sup>1</sup>	3
CHEM 111	General Chemistry I Lab <sup>1</sup>	1
MATH 225	Calculus I <sup>1,2</sup>	4
PHYS 216	University Physics 1 with Lab <sup>1,2</sup>	4

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

## Chemistry Education Concentration

Code	Title	Hours
CPSC 146	Programming Principles <sup>1,2</sup>	3
EGEO 201	Earth Materials and Processes/Lab	4
SEFE 338	Standards-Based Instruction & Assessment in the Inclusionary Classroom <sup>1</sup>	3
SEFE 342	Educational Psychology for Diverse Learners <sup>1</sup>	3
<b>Total Hours</b>		<b>13</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

## ACS Certification – Optional

Code	Title	Hours
CHEM 490	Independent Study <sup>1</sup>	2
CHEM 496	Research <sup>1</sup>	1
<b>Total Hours</b>		<b>3</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student

success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes (e.g., Organic Chemistry II Lab)
2. Student-faculty research
3. Student leadership development (Chemistry Club)
4. Career education and development
5. Internships
6. Student teaching (serve as Lab Assistants and tutors)
7. Volunteering

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

CHEMISTRY-BS (6118)

Concentration in Chemistry Education (CHED)

This program is effective as of Summer 2022

Revised 07.06.2022

UCC 03.22.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
Select one of the following:		3-4
MATH 120	Intermediate Algebra (if necessary)	
MATH 125	Precalculus (if necessary)	
MATH 225	Calculus I (if necessary)	
MATH 230	Calculus II	
BIOL 104		4
SUBJ 139	University Seminar <sup>1</sup>	3
ESAP 101	FYRST Seminar *	1
<b>Hours</b>		<b>15-16</b>
<b>Spring</b>		
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
Select one of the following:		4
MATH 125	Precalculus (if necessary)	
MATH 225	Calculus I (if necessary)	
MATH 230	Calculus II	
ENGL 102	Critical Writing	3
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>14</b>

**Second Year****Fall**

CHEM 201 & CHEM 211	Organic Chemistry I and Organic Chemistry Laboratory I	4
CHEM 243	Introduction to Research in Chemistry	1
Select one of the following:		4
MATH 225	Calculus I (if necessary)	
MATH 230	Calculus II	
PHYS 213	General Physics III/ Lab	4
ENGL 104	Critical Reading	3
<b>Hours</b>		<b>16</b>

**Spring**

CHEM 202 & CHEM 212	Organic Chemistry II and Organic Chemistry Laboratory II	4
MATH 230	Calculus II (if necessary)	4
PHYS 217	University Physics 2 with Lab	4
EGEO 101 & EGEO 111	Physical Geology and Physical Geology Lab	4
<b>Hours</b>		<b>16</b>

**Third Year****Fall**

CHEM 335 & CHEM 336	Biochemistry I and Biochemistry Laboratory I	4
CHEM 350 & CHEM 351	Analytical Chemistry and Analytical Chemistry Lab	4
Civil Discourse Requirement - select one		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
CPSC 146	Programming Principles	3
<b>Hours</b>		<b>14</b>

**Spring**

Select one of the following:		3
CHEM 302	Physical Chemistry II (even years)	
CHEM 460	Materials Chemistry (odd years)	
Select one of the following In Depth Chemistry Electives (1 lecture and 1 lab):		4
CHEM 337 & CHEM 338	Biochemistry II and Biochemistry Laboratory II	
CHEM 340	Air Quality Assessment (even years)	
CHEM 370	Water Quality Assessment (odd years)	
CHEM 415 & CHEM 416	Forensic Analysis and Forensic Analysis Lab	
CHEM 475	Advanced Organic Synthesis	
CHEM 425 & CHEM 426	Instrumental Analysis and Instrumental Analysis Laboratory	4
CHEM 491	Chemistry Seminar	1
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>15</b>

**Fourth Year****Fall**

CHEM 301 & CHEM 321	Physical Chemistry 1 and Physical Chemistry Laboratory I	4
CHEM 442	Inorganic Chemistry	3

SEFE 342	Educational Psychology for Diverse Learners	3
Inquiry/Thread/Elective Course		3
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Select one of the following:		3
CHEM 302	Physical Chemistry II (even years)	
CHEM 460	Materials Chemistry (odd years)	
CHEM 452	Physical Inorganic Chemistry Laboratory	1
SEFE 338	Standards-Based Instruction & Assessment in the Inclusionary Classroom	3
Inquiry/Thread/Elective Course		3
Inquiry/Thread/Elective Course		3
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>16</b>
<b>Total Hours**</b>		<b>122-123</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

\* Students are encouraged to take ESAP 101 as a Free Elective.

Optional ACS Certification requires 2 credits of CHEM 490: Independent Study and 1 credit of CHEM 496: Research.

Major Code: 6118

Concentration Code: CHED

Revised date: 08.02.2021

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

## Chemistry, Bachelor of Science (BS) - Concentration in Computational Chemistry

The Slippery Rock University Chemistry Degree is certified by the American Chemistry Society or ACS. In order to earn ACS certification, students must complete 2 credits of Independent Study and 1 credit of Research in addition to the BS requirements. Students can also choose an option concentration in order to broaden their background in chemistry or to gain additional experience if they wish to pursue other interests.

Concentrations are available in the following areas:

- Biochemistry
- Computational Chemistry
- Education
- Environmental Chemistry
- Forensic Chemistry
- Health Sciences

## Program Learning Outcomes

- Students will demonstrate knowledge of the main disciplines of chemistry, namely *Organic, Analytical, Biological, Physical, and Inorganic* chemistry.
- Students will demonstrate development of technical skills for practical applications of chemistry.
- Students will present collected experimental data in written and oral reports.
- Students and faculty will participate in faculty-led research projects. Students are expected to be actively working in the laboratory under the supervision and guidance of a faculty mentor.

## Related Links

Chemistry - Computational Chemistry, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/chemistry-computational-chemistry/>)

Chemistry Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/chemistry/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	56
	Natural Science and Math College-Wide Requirements	12
	Computational Chemistry Concentration	21
	ACS Certification – Optional	0-3

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 225	Calculus I <sup>2,3</sup>	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16

#### Integrated Inquiry

*Creative and Aesthetic Inquiry*

Select 3 Credits (p. 29)	3
<i>Humanities Inquiry</i>	
Select 3 Credits (p. 29)	3
<i>Social Science Inquiry</i>	
Select 3 Credits (p. 29)	3
<i>Natural Sciences Inquiry</i>	
CHEM 107                      General Chemistry I & CHEM 111                      and General Chemistry I Lab <sup>2,3</sup>	4
<i>Physical Sciences Inquiry</i>	
PHYS 216                      University Physics 1 with Lab <sup>2,3</sup>	4
Subtotal	17
<b>Thematic Thread</b>	
Select 12 Credits (p. 29) <sup>4</sup>	12
<b>Total Hours</b>	<b>45</b>

- Course offered in multiple subjects; cannot take in first major subject
- Course counts for 50% of Major requirements and Major GPA
- Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.
- One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.



## Major/Concentration Requirements

- 27 major credits must be taken at SRU or PASSHE
- 27 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Introductory Chemistry Courses</b>		
CHEM 108	General Chemistry II <sup>1</sup>	3
CHEM 112	General Chemistry II Lab <sup>1</sup>	1
Subtotal		4
<b>Required Foundation Chemistry Courses</b>		
CHEM 201	Organic Chemistry I <sup>1</sup>	3
CHEM 211	Organic Chemistry Laboratory I <sup>1</sup>	1
CHEM 301	Physical Chemistry I <sup>1</sup>	3
CHEM 321	Physical Chemistry Laboratory I <sup>1</sup>	1
CHEM 335	Biochemistry I <sup>1</sup>	3
CHEM 336	Biochemistry Laboratory I <sup>1</sup>	1
CHEM 350	Analytical Chemistry <sup>1</sup>	3
CHEM 351	Analytical Chemistry Lab <sup>1</sup>	1
CHEM 442	Inorganic Chemistry <sup>1</sup>	3
CHEM 452	Physical Inorganic Chemistry Laboratory <sup>1</sup>	1
Subtotal		20
<b>Required In-Depth Chemistry Courses</b>		
CHEM 202	Organic Chemistry II <sup>1</sup>	3
CHEM 212	Organic Chemistry Laboratory II <sup>1</sup>	1
CHEM 302	Physical Chemistry II <sup>1</sup>	3
CHEM 425	Instrumental Analysis <sup>1</sup>	3
CHEM 426	Instrumental Analysis Laboratory <sup>1</sup>	1
CHEM 460	Materials Chemistry <sup>1</sup>	3
Subtotal		14
<b>Additional Required In-Depth Chemistry Courses</b>		
Select one lecture and one laboratory course:		4
CHEM 337	Biochemistry II <sup>1</sup>	
CHEM 338	Biochemistry Laboratory II <sup>1</sup>	
CHEM 340	Air Quality Assessment <sup>1</sup>	
CHEM 370	Water Quality Assessment <sup>1</sup>	
CHEM 415	Forensic Analysis <sup>1</sup>	
CHEM 416	Forensic Analysis Lab <sup>1</sup>	
CHEM 475	Advanced Organic Synthesis <sup>1</sup>	
Subtotal		4
<b>Cognate Courses</b>		
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab <sup>1</sup>	4
MATH 230	Calculus II <sup>1</sup>	4
PHYS 217	University Physics 2 with Lab <sup>1</sup>	4
Subtotal		12
<b>Total Hours</b>		<b>54</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Natural Science and Math College Wide Requirements

Code	Title	Hours
CHEM 107	General Chemistry I <sup>1,2</sup>	3
CHEM 111	General Chemistry I Lab <sup>1,2</sup>	1
MATH 225	Calculus I <sup>1,2</sup>	4
PHYS 216	University Physics 1 with Lab <sup>1,2</sup>	4
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

## Computational Chemistry Concentration

Code	Title	Hours
<b>Computer Science Courses</b>		
CPSC 146	Programming Principles <sup>1</sup>	3
CPSC 246	Advanced Programming Principles <sup>1</sup>	3
CPSC 374	Algorithms and Data Structures <sup>1</sup>	3
CPSC 480	Topics in Computer Science: Machine Learning <sup>1</sup>	3
Subtotal		12
<b>Required Math and Science Courses</b>		
PHYS 385	Computational Physics <sup>1</sup>	3
STAT 152	Elementary Statistics I <sup>1</sup>	3
MATH 240	Linear Algebra and Differential Equations <sup>1</sup>	3
Subtotal		9
<b>Total Hours</b>		<b>21</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

## ACS Certification – Optional

Code	Title	Hours
CHEM 490	Independent Study <sup>1</sup>	2
CHEM 496	Research <sup>1</sup>	1
<b>Total Hours</b>		<b>3</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes (e.g., Organic Chemistry II Lab)
2. Student-faculty research
3. Student leadership development (Chemistry Club)
4. Career education and development
5. Internships
6. Student teaching (serve as Lab Assistants and tutors)
7. Volunteering

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled

SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

CHEMISTRY - BS (6118)  
Concentration in Computational Chemistry (CCHM)  
This program is effective as of Summer 2022  
Revised 07.06.2022  
UCC 03.22.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
Select one of the following:		3-4
MATH 120	Intermediate Algebra (if necessary)	
MATH 125	Precalculus (if necessary)	
MATH 225	Calculus I (if necessary)	
MATH 230	Calculus II	
BIOL 104		4
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ESAP 101	FYRST Seminar *	1
<b>Hours</b>		<b>15-16</b>
<b>Spring</b>		
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
Select one of the following:		4
MATH 125	Precalculus (if necessary)	
MATH 225	Calculus I (if necessary)	
MATH 230	Calculus II	
ENGL 102	Critical Writing	3
STAT 152	Elementary Statistics I	3
<b>Hours</b>		<b>14</b>
<b>Second Year</b>		
<b>Fall</b>		
CHEM 201 & CHEM 211	Organic Chemistry I and Organic Chemistry Laboratory I	4
CHEM 243	Introduction to Research in Chemistry	1
Select one of the following:		4
MATH 225	Calculus I (if necessary)	
MATH 230	Calculus II	
PHYS 216	University Physics 1 with Lab	4
CPSC 146	Programming Principles	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
CHEM 202 & CHEM 212	Organic Chemistry II and Organic Chemistry Laboratory II	4

MATH 230	Calculus II	4
PHYS 217	University Physics 2 with Lab	4
ENGL 104	Critical Reading	3
CPSC 246	Advanced Programming Principles	3
<b>Hours</b>		<b>18</b>

### Third Year

#### Fall

CHEM 335 & CHEM 336	Biochemistry I and Biochemistry Laboratory I	4
CHEM 350 & CHEM 351	Analytical Chemistry and Analytical Chemistry Lab	4
BIOL 370	Molecular Biology with Lab	3
CPSC 374	Algorithms and Data Structures	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
<b>Hours</b>		<b>17</b>

#### Spring

Select one of the following:		3
CHEM 302	Physical Chemistry II (even years)	
CHEM 460	Materials Chemistry (odd years)	
Select one of the following:		4
In Depth Chemistry Elective (1 lecture and 1 lab)		
CHEM 337 & CHEM 338	Biochemistry II and Biochemistry Laboratory II	
CHEM 415 & CHEM 416	Forensic Analysis and Forensic Analysis Lab	
CHEM 475	Advanced Organic Synthesis	
CHEM 425 & CHEM 426	Instrumental Analysis and Instrumental Analysis Laboratory	4
CHEM 491	Chemistry Seminar	1
CPSC 480	Topics in Computer Science: Machine Learning	3
<b>Hours</b>		<b>15</b>

### Fourth Year

#### Fall

CHEM 301 & CHEM 321	Physical Chemistry 1 and Physical Chemistry Laboratory I	4
CHEM 442	Inorganic Chemistry	3
PHYS 385	Computational Physics	3
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>13</b>

#### Spring

Select one of the following:		3
CHEM 302	Physical Chemistry II (even years)	
CHEM 460	Materials Chemistry (odd years)	
CHEM 452	Physical Inorganic Chemistry Laboratory	1
Inquiry/Thread Course(s)/Elective(s)		3
Inquiry/Thread/Elective Course		3

Inquiry/Thread/Elective Course	3
<b>Hours</b>	<b>13</b>
<b>Total Hours**</b>	<b>121-122</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

\* Students are encouraged to take ESAP 101 as a Free Elective.

Optional ACS Certification requires 2 credits of CHEM 490: Independent Study and 1 credit of CHEM 496: Research.

Major Code: 6118

Concentration Code: CCHM

Revised date: 08.02.2021

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

## Chemistry, Bachelor of Science (BS) - Concentration in Environmental Chemistry

The Slippery Rock University Chemistry Degree is certified by the American Chemistry Society or ACS. In order to earn ACS certification, students must complete 2 credits of Independent Study and 1 credit of Research in addition to the BS requirements. Students can also choose an option concentration in order to broaden their background in chemistry or to gain additional experience if they wish to pursue other interests.

Concentrations are available in the following areas:

- Biochemistry
- Computational Chemistry
- Education
- Environmental Chemistry
- Forensic Chemistry
- Health Sciences

## Program Learning Outcomes

- Students will demonstrate knowledge of the main disciplines of chemistry, namely Organic, Analytical, Biological, Physical, and Inorganic chemistry.
- Students will demonstrate development of technical skills for practical applications of chemistry.
- Students will present collected experimental data in written and oral reports.
- Students and faculty will participate in faculty-led research projects. Students are expected to be actively working in the laboratory under the supervision and guidance of a faculty mentor.

## Related Links

Chemistry - Environmental Chemistry, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/chemistry-environmental-chemistry/>)

Chemistry Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/chemistry/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	54
	Natural Science and Math College Wide Requirement	12
	Environmental Chemistry Concentration	14-15
	ACS Certification – Optional	0-3
	Electives	7

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 225	Calculus I <sup>2,3</sup>	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16

### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab <sup>2,3</sup>	4
<i>Physical Sciences Inquiry</i>		
PHYS 216	University Physics 1 with Lab <sup>2,3</sup>	4

Subtotal	17
<b>Thematic Thread</b>	
Select 12 Credits (p. 29) <sup>4</sup>	12
<b>Total Hours</b>	<b>45</b>

- <sup>1</sup> Course offered in multiple subjects; cannot take in first major subject
- <sup>2</sup> Course counts for 50% of Major requirements and Major GPA
- <sup>3</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.
- <sup>4</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- 27 major credits must be taken at SRU or PASSHE
- 27 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Introductory Chemistry Courses</b>		
CHEM 108	General Chemistry II <sup>1</sup>	3
CHEM 112	General Chemistry II Lab <sup>1</sup>	1
Subtotal		4

## Required Foundation Chemistry Courses

CHEM 201	Organic Chemistry I <sup>1</sup>	3
CHEM 211	Organic Chemistry Laboratory I <sup>1</sup>	1
CHEM 301	Physical Chemistry I <sup>1</sup>	3
CHEM 321	Physical Chemistry Laboratory I <sup>1</sup>	1
CHEM 335	Biochemistry I <sup>1</sup>	3
CHEM 336	Biochemistry Laboratory I <sup>1</sup>	1
CHEM 350	Analytical Chemistry <sup>1</sup>	3
CHEM 351	Analytical Chemistry Lab <sup>1</sup>	1
CHEM 442	Inorganic Chemistry <sup>1</sup>	3
CHEM 452	Physical Inorganic Chemistry Laboratory <sup>1</sup>	1
Subtotal		20

## Required In-Depth Chemistry Courses

CHEM 202	Organic Chemistry II <sup>1</sup>	3
CHEM 212	Organic Chemistry Laboratory II <sup>1</sup>	1
CHEM 302	Physical Chemistry II <sup>1</sup>	3
CHEM 425	Instrumental Analysis <sup>1</sup>	3
CHEM 426	Instrumental Analysis Laboratory <sup>1</sup>	1
CHEM 460	Materials Chemistry <sup>1</sup>	3
Subtotal		14

## Additional Required In-Depth Chemistry Courses

Select one lecture and one laboratory course:		4
CHEM 337	Biochemistry II <sup>1</sup>	
CHEM 338	Biochemistry Laboratory II <sup>1</sup>	
CHEM 340	Air Quality Assessment <sup>1</sup>	
CHEM 370	Water Quality Assessment <sup>1</sup>	
CHEM 415	Forensic Analysis <sup>1</sup>	
CHEM 416	Forensic Analysis Lab <sup>1</sup>	
CHEM 475	Advanced Organic Synthesis <sup>1</sup>	
Subtotal		4

## Cognate Courses

BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab <sup>1</sup>	4
PHYS 217	University Physics 2 with Lab <sup>1</sup>	4
MATH 230	Calculus II <sup>1</sup>	4
Subtotal		12
<b>Total Hours</b>		<b>54</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Natural Science and Math College-Wide Requirement

Code	Title	Hours
CHEM 107	General Chemistry I <sup>1,2</sup>	3
CHEM 111	General Chemistry I Lab <sup>1,2</sup>	1
MATH 225	Calculus I <sup>1,2</sup>	4
PHYS 216	University Physics 1 with Lab <sup>1,2</sup>	4
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

## Environmental Chemistry Concentration

Code	Title	Hours
<b>Required Courses</b>		
BIOL 401	Ecology with Lab <sup>1</sup>	3
EGEO 451	Geochemistry/Lab <sup>1</sup>	4
Subtotal		7
<b>Required Chemistry Courses</b>		
Select one of the following:		4
CHEM 340	Air Quality Assessment <sup>1</sup>	
CHEM 370	Water Quality Assessment <sup>1</sup>	
Subtotal		4
<b>Additional Required Course</b>		
Select one of the following:		3-4
BIOL 305	Wetlands and Aquatic Plants/Lab <sup>1</sup>	
BIOL 306	Freshwater Biomonitoring/Lab <sup>1</sup>	
CHEM 340	Air Quality Assessment <sup>1</sup>	
CHEM 370	Water Quality Assessment <sup>1</sup>	
EGEO 201	Earth Materials and Processes/Lab <sup>1</sup>	
Subtotal		3-4
<b>Total Hours</b>		<b>14-15</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

## ACS Certification – Optional

Code	Title	Hours
CHEM 490	Independent Study <sup>1</sup>	2
CHEM 496	Research <sup>1</sup>	1
<b>Total Hours</b>		<b>3</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes (e.g., Organic Chemistry II Lab)
2. Student-faculty research
3. Student leadership development (Chemistry Club)
4. Career education and development
5. Internships
6. Student teaching (serve as Lab Assistants and tutors)
7. Volunteering

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information*

*on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

CHEMISTRY - BS (6118)

Concentration in Environmental Chemistry (ENVI)

This program is effective as of Summer 2022

Revised 07.06.2022

UCC 03.22.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
Select one of the following:		3-4
MATH 120	Intermediate Algebra (if necessary)	
MATH 125	Precalculus (if necessary)	
MATH 225	Calculus I (if necessary)	
MATH 230	Calculus II	
BIOL 104		4
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ESAP 101	FYRST Seminar *	1
<b>Hours</b>		<b>15-16</b>
<b>Spring</b>		
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
Select one of the following:		4
MATH 125	Precalculus (if necessary)	
MATH 225	Calculus I (if necessary)	
MATH 230	Calculus II	
ENGL 102	Critical Writing	3
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>14</b>
<b>Second Year</b>		
<b>Fall</b>		
CHEM 201 & CHEM 211	Organic Chemistry I and Organic Chemistry Laboratory I	4
CHEM 243	Introduction to Research in Chemistry	1
Select one of the following:		4
MATH 225	Calculus I (if necessary)	
MATH 230	Calculus II	
PHYS 216	University Physics 1 with Lab	4
ENGL 104	Critical Reading	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
CHEM 202 & CHEM 212	Organic Chemistry II and Organic Chemistry Laboratory II	4
MATH 230	Calculus II (if necessary)	4
PHYS 217	University Physics 2 with Lab	4
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>15</b>



**Third Year****Fall**

CHEM 335 & CHEM 336	Biochemistry I and Biochemistry Laboratory I	4
CHEM 350 & CHEM 351	Analytical Chemistry and Analytical Chemistry Lab	4
Civil Discourse Requirement - select one		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
BIOL 401	Ecology with Lab	3
<b>Hours</b>		<b>14</b>

**Spring**

Select one of the following:		3
CHEM 302	Physical Chemistry II (even years)	
CHEM 460	Materials Chemistry (odd years)	
Select one of the following:		4
In Depth Chemistry Elective (1 lecture and 1 lab)		
CHEM 337 & CHEM 338	Biochemistry II and Biochemistry Laboratory II	
CHEM 415 & CHEM 416	Forensic Analysis and Forensic Analysis Lab	
CHEM 475	Advanced Organic Synthesis	
CHEM 425 & CHEM 426	Instrumental Analysis and Instrumental Analysis Laboratory	4
CHEM 491	Chemistry Seminar	1
Select one of the following:		4
CHEM 340	Air Quality Assessment (even years)	
CHEM 370	Water Quality Assessment (odd years)	
<b>Hours</b>		<b>16</b>

**Fourth Year****Fall**

CHEM 301 & CHEM 321	Physical Chemistry 1 and Physical Chemistry Laboratory I	4
CHEM 442	Inorganic Chemistry	3
Select 3-4 credits from the following		3-4
BIOL 305	Wetlands and Aquatic Plants/Lab	
BIOL 306	Freshwater Biomonitoring/Lab	
CHEM 340	Air Quality Assessment	
CHEM 370	Water Quality Assessment	
EGEO 201	Earth Materials and Processes/Lab	
Inquiry/Thread/Elective Course		3
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>16-17</b>

**Spring**

Select one of the following:		3
CHEM 302	Physical Chemistry II (even years)	
CHEM 460	Materials Chemistry (odd years)	
CHEM 452	Physical Inorganic Chemistry Laboratory	1
EGEO 451	Geochemistry/Lab	4
Inquiry/Thread/Elective Course		3
Inquiry/Thread/Elective Course		3

Inquiry/Thread/Elective Course	3
<b>Hours</b>	<b>17</b>
<b>Total Hours**</b>	<b>123-125</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

\* Students are encouraged to take ESAP 101 as a Free Elective.

Optional ACS Certification requires 2 credits of CHEM 490: Independent Study and 1 credit of CHEM 496: Research.

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

Major Code: 6118

Concentration Code: ENVI

Revised date: 08.02.2021

## Chemistry, Bachelor of Science (BS) - Concentration in Forensic Chemistry

The Slippery Rock University Chemistry Degree is certified by the American Chemistry Society or ACS. In order to earn ACS certification, students must complete 2 credits of Independent Study and 1 credit of Research in addition to the BS requirements. Students can also choose an option concentration in order to broaden their background in chemistry or to gain additional experience if they wish to pursue other interests.

Concentrations are available in the following areas:

- Biochemistry
- Computational Chemistry
- Education
- Environmental Chemistry
- Forensic Chemistry
- Health Sciences

## Program Learning Outcomes

- Students will demonstrate knowledge of the main disciplines of chemistry, namely *Organic, Analytical, Biological, Physical, and Inorganic* chemistry.
- Students will demonstrate development of technical skills for practical applications of chemistry.
- Students will present collected experimental data in written and oral reports.
- Students and faculty will participate in faculty-led research projects. Students are expected to be actively working in the laboratory under the supervision and guidance of a faculty mentor.

## Related Links

Chemistry - Forensic Chemistry, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/chemistry-forensic-chemistry/>)

Chemistry Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/chemistry/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	54
	Natural Science and Math College Wide Requirement	12
	Forensic Chemistry Concentration	18
	ACS Certification – Optional	0-3
	Electives	3

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 225	Calculus I	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab <sup>2,3</sup>	4
<i>Physical Sciences Inquiry</i>		
PHYS 216	University Physics 1 with Lab <sup>2,3</sup>	4
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>4</sup>		12
<b>Total Hours</b>		<b>45</b>

- <sup>1</sup> Course offered in multiple subjects; cannot take in first major subject
- <sup>2</sup> Course counts for 50% of Major requirements and Major GPA
- <sup>3</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.
- <sup>4</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

### Major/Concentration Requirements

- 27 major credits must be taken at SRU or PASSHE
- 27 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Introductory Chemistry Courses</b>		
CHEM 108	General Chemistry II <sup>1</sup>	3
CHEM 112	General Chemistry II Lab <sup>1</sup>	1
Subtotal		4
<b>Required Foundation Chemistry Courses</b>		
CHEM 201	Organic Chemistry I <sup>1</sup>	3
CHEM 211	Organic Chemistry Laboratory I <sup>1</sup>	1
CHEM 301	Physical Chemistry I <sup>1</sup>	3
CHEM 321	Physical Chemistry Laboratory I <sup>1</sup>	1
CHEM 335	Biochemistry I <sup>1</sup>	3

CHEM 336	Biochemistry Laboratory I <sup>1</sup>	1
CHEM 350	Analytical Chemistry <sup>1</sup>	3
CHEM 351	Analytical Chemistry Lab <sup>1</sup>	1
CHEM 442	Inorganic Chemistry <sup>1</sup>	3
CHEM 452	Physical Inorganic Chemistry Laboratory <sup>1</sup>	1
Subtotal		20

**Required In-Depth Chemistry Courses**

CHEM 202	Organic Chemistry II <sup>1</sup>	3
CHEM 212	Organic Chemistry Laboratory II <sup>1</sup>	1
CHEM 302	Physical Chemistry II <sup>1</sup>	3
CHEM 425	Instrumental Analysis <sup>1</sup>	3
CHEM 426	Instrumental Analysis Laboratory <sup>1</sup>	1
CHEM 460	Materials Chemistry <sup>1</sup>	3
Subtotal		14

**Additional Required In-Depth Chemistry Courses**

Select one lecture and one laboratory course:		4
CHEM 337	Biochemistry II <sup>1</sup>	
CHEM 338	Biochemistry Laboratory II <sup>1</sup>	
CHEM 340	Air Quality Assessment <sup>1</sup>	
CHEM 370	Water Quality Assessment <sup>1</sup>	
CHEM 415	Forensic Analysis <sup>1</sup>	
CHEM 416	Forensic Analysis Lab <sup>1</sup>	
CHEM 475	Advanced Organic Synthesis <sup>1</sup>	
Subtotal		4

**Cognate Courses**

BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab <sup>1</sup>	4
PHYS 217	University Physics 2 with Lab <sup>1</sup>	4
MATH 230	Calculus II <sup>1</sup>	4
Subtotal		12

**Total Hours** 54<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**Natural Science and Math College-Wide Requirement**

Code	Title	Hours
CHEM 107	General Chemistry I <sup>1,2</sup>	3
CHEM 111	General Chemistry I Lab <sup>1,2</sup>	1
MATH 225	Calculus I <sup>1,2</sup>	4
PHYS 216	University Physics 1 with Lab <sup>1,2</sup>	4
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA<sup>2</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.**Forensic Chemistry Concentration**

Code	Title	Hours
<b>Required Courses</b>		
CHEM 204	Introduction to Forensic Science <sup>1</sup>	3
CHEM 415	Forensic Analysis <sup>1</sup>	3

CHEM 416	Forensic Analysis Lab <sup>1</sup>	1
BIOL 250	Genetics with Lab <sup>1</sup>	4
BIOL 370	Molecular Biology with Lab <sup>1</sup>	3
CRIM 110	Introduction to Criminology & Criminal Justice Systems <sup>1</sup>	3
Subtotal		17

**Electives**

Department of Chemistry strongly recommends that the following course be taken:

CRIM 343	Criminal Investigations	3
Subtotal		3

**Total Hours** 20<sup>1</sup> Course counts for 50% of Major requirements and Major GPA**ACS Certification – Optional**

Code	Title	Hours
CHEM 490	Independent Study <sup>1</sup>	2
CHEM 496	Research <sup>1</sup>	1
<b>Total Hours</b>		<b>3</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA**Co-curricular and Experiential Learning**

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes (e.g., Organic Chemistry II Lab)
2. Student-faculty research
3. Student leadership development (Chemistry Club)
4. Career education and development
5. Internships
6. Student teaching (serve as Lab Assistants and tutors)
7. Volunteering

**Important Curriculum Guide Notes**

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

CHEMISTRY - BS (6118)

Concentration in Forensic Chemistry (FORE)

This program is effective as of Summer 2022

Revised 07.06.2022

UCC 03.22.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
Select one of the following:		3-4
MATH 120	Intermediate Algebra (if necessary)	
MATH 125	Precalculus (if necessary)	
MATH 225	Calculus I (if necessary)	
MATH 230	Calculus II	
BIOL 104		4
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>15-16</b>
<b>Spring</b>		
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
Select one of the following:		4
MATH 125	Precalculus (if necessary)	
MATH 225	Calculus I (if necessary)	
MATH 230	Calculus II	
ENGL 102	Critical Writing	3
BIOL 250	Genetics with Lab	4
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
CHEM 201 & CHEM 211	Organic Chemistry I and Organic Chemistry Laboratory I	4
CHEM 243	Introduction to Research in Chemistry	1
Select one of the following:		4
MATH 225	Calculus I (if necessary)	
MATH 230	Calculus II	
PHYS 216	University Physics 1 with Lab	4
ENGL 104	Critical Reading	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
CHEM 202 & CHEM 212	Organic Chemistry II and Organic Chemistry Laboratory II	4
MATH 230	Calculus II	4
PHYS 217	University Physics 2 with Lab	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>18</b>
<b>Third Year</b>		
<b>Fall</b>		
CHEM 335 & CHEM 336	Biochemistry I and Biochemistry Laboratory I	4

CHEM 350 & CHEM 351	Analytical Chemistry and Analytical Chemistry Lab	4
BIOL 370	Molecular Biology with Lab	3
CRIM 110	Introduction to Criminology & Criminal Justice Systems	3
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
Select one of the following:		3
CHEM 302	Physical Chemistry II (even years)	
CHEM 460	Materials Chemistry (odd years)	
CHEM 415 & CHEM 416	Forensic Analysis and Forensic Analysis Lab	4
CHEM 425 & CHEM 426	Instrumental Analysis and Instrumental Analysis Laboratory	4
CHEM 491	Chemistry Seminar	1
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
CHEM 301 & CHEM 321	Physical Chemistry 1 and Physical Chemistry Laboratory I	4
CHEM 442	Inorganic Chemistry	3
Inquiry/Thread/Elective Course		3
Inquiry/Thread/Elective Course		3
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Select one of the following:		3
CHEM 302	Physical Chemistry II (even years)	
CHEM 460	Materials Chemistry (odd years)	
CHEM 452	Physical Inorganic Chemistry Laboratory	1
Inquiry/Thread/Elective Course		3
Inquiry/Thread/Elective Course		3
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>13</b>
<b>Total Hours**</b>		<b>122-123</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

\* Students are encouraged to take ESAP 101 as a Free Elective.

Optional ACS Certification requires 2 credits of CHEM 490: Independent Study and 1 credit of CHEM 496: Research.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6118

Concentration Code: FORE

Revised date: 08.02.2021

## Chemistry, Bachelor of Science (BS) - Concentration in Health Sciences

The Slippery Rock University Chemistry Degree is certified by the American Chemistry Society or ACS. In order to earn ACS certification, students must complete 2 credits of Independent Study and 1 credit of Research in addition to the BS requirements. Students can also choose an option concentration in order to broaden their background in chemistry or to gain additional experience if they wish to pursue other interests.

Concentrations are available in the following areas:

- Biochemistry
- Computational Chemistry
- Education
- Environmental Chemistry
- Forensic Chemistry
- Health Sciences

## Program Learning Outcomes

- Students will demonstrate knowledge of the main disciplines of chemistry, namely *Organic, Analytical, Biological, Physical, and Inorganic* chemistry.
- Students will demonstrate development of technical skills for practical applications of chemistry.
- Students will present collected experimental data in written and oral reports.
- Students and faculty will participate in faculty-led research projects. Students are expected to be actively working in the laboratory under the supervision and guidance of a faculty mentor.

## Related Links

Chemistry - Health Sciences, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/chemistry-health-sciences/>)

Chemistry Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/chemistry/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	58
	Natural Science and Math College-Wide Requirements	12
	Concentration Requirements	22
	ACS Certification –Optional	0-3

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 225	Calculus I <sup>2</sup>	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab <sup>2</sup>	4
<i>Physical Sciences Inquiry</i>		
PHYS 216	University Physics 1 with Lab <sup>2</sup>	4
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>3</sup>		12
<b>Total Hours</b>		<b>45</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> Course counts for 50% of Major requirements and Major GPA

<sup>3</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>



## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- 27 major credits must be taken at SRU or PASSHE
- 27 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Introductory Chemistry Courses</b>		
CHEM 108	General Chemistry II <sup>1</sup>	3
CHEM 112	General Chemistry II Lab <sup>1</sup>	1
Subtotal		4
<b>Required Foundation Chemistry Courses</b>		
CHEM 201	Organic Chemistry I <sup>1</sup>	3
CHEM 211	Organic Chemistry Laboratory I <sup>1</sup>	1
CHEM 301	Physical Chemistry I <sup>1</sup>	3
CHEM 321	Physical Chemistry Laboratory I <sup>1</sup>	1
CHEM 335	Biochemistry I <sup>1</sup>	3
CHEM 336	Biochemistry Laboratory I <sup>1</sup>	1
CHEM 350	Analytical Chemistry <sup>1</sup>	3
CHEM 351	Analytical Chemistry Lab <sup>1</sup>	1
CHEM 442	Inorganic Chemistry <sup>1</sup>	3
CHEM 452	Physical Inorganic Chemistry Laboratory <sup>1</sup>	1
Subtotal		20
<b>Required In-Depth Chemistry Courses</b>		
CHEM 202	Organic Chemistry II <sup>1</sup>	3
CHEM 212	Organic Chemistry Laboratory II <sup>1</sup>	1
CHEM 302	Physical Chemistry II <sup>1</sup>	3
CHEM 425	Instrumental Analysis <sup>1</sup>	3
CHEM 426	Instrumental Analysis Laboratory <sup>1</sup>	1
CHEM 460	Materials Chemistry <sup>1</sup>	3
Subtotal		14
<b>Additional Required In-Depth Chemistry Courses</b>		
Select four credits (must include one lecture and one lab):		4
CHEM 337	Biochemistry II <sup>1</sup>	
CHEM 338	Biochemistry Laboratory II <sup>1</sup>	
CHEM 340	Air Quality Assessment <sup>1</sup>	
CHEM 370	Water Quality Assessment <sup>1</sup>	

CHEM 415	Forensic Analysis <sup>1</sup>	
CHEM 416	Forensic Analysis Lab <sup>1</sup>	
CHEM 475	Advanced Organic Synthesis <sup>1</sup>	
Subtotal		4
<b>Cognate Courses</b>		
BIOL 104	<sup>1</sup>	4
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab <sup>1</sup>	4
PHYS 217	University Physics 2 with Lab <sup>1</sup>	4
MATH 230	Calculus II <sup>1</sup>	4
Subtotal		16
<b>Total Hours</b>		<b>58</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
CHEM 107	General Chemistry I <sup>1</sup>	3
CHEM 111	General Chemistry I Lab <sup>1</sup>	1
MATH 225	Calculus I <sup>1</sup>	4
PHYS 216	University Physics 1 with Lab <sup>1</sup>	4
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

## Health Sciences Concentration

Code	Title	Hours
BIOL 216	Anatomy and Physiology I with Lab <sup>1</sup>	3
BIOL 217	Anatomy and Physiology II with Lab <sup>1</sup>	3
BIOL 250	Genetics with Lab <sup>1</sup>	4
BIOL 330	Microbiology/Lab <sup>1</sup>	3
EXSC 250	Medical Terminology <sup>1</sup>	3
or HCAM 250	Medical Terminology for Healthcare Administrators	
PSYC 105	Introduction to Psychology <sup>1</sup>	3
STAT 152	Elementary Statistics I <sup>1</sup>	3
<b>Total Hours</b>		<b>22</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

## ACS Certification – Optional

Code	Title	Hours
CHEM 490	Independent Study <sup>1</sup>	2
CHEM 496	Research <sup>1</sup>	1
<b>Total Hours</b>		<b>3</b>

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes (e.g., Organic Chemistry II Lab)
2. Student-faculty research
3. Student leadership development (Chemistry Club)
4. Career education and development
5. Internships
6. Student teaching (serve as Lab Assistants and tutors)
7. Volunteering

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

CHEMISTRY - BS (6118)

Concentration in Health Sciences (CHHS)

This program is effective as of Summer 2022

Revised 07.06.2022

UCC 3.22.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
Select one of the following:		3-4
MATH 120	Intermediate Algebra (if necessary)	
MATH 125	Precalculus (if necessary)	
MATH 225	Calculus I (if necessary)	
MATH 230	Calculus II	
BIOL 104		4
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>15-16</b>
<b>Spring</b>		
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
Select one of the following:		4
MATH 125	Precalculus (if necessary)	
MATH 225	Calculus I (if necessary)	
MATH 230	Calculus II	
ENGL 102	Critical Writing	3
BIOL 250	Genetics with Lab	4
<b>Hours</b>		<b>15</b>

## Second Year

### Fall

CHEM 201 & CHEM 211	Organic Chemistry I and Organic Chemistry Laboratory I	4
CHEM 243	Introduction to Research in Chemistry	1
Select one of the following:		4
MATH 225	Calculus I (if necessary)	
MATH 230	Calculus II	
PHYS 216	University Physics 1 with Lab	4
ENGL 104	Critical Reading	3
<b>Hours</b>		<b>16</b>

### Spring

CHEM 202 & CHEM 212	Organic Chemistry II and Organic Chemistry Laboratory II	4
MATH 230	Calculus II	4
PHYS 217	University Physics 2 with Lab	4
STAT 152	Elementary Statistics I	3
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>18</b>

## Third Year

### Fall

CHEM 335 & CHEM 336	Biochemistry I and Biochemistry Laboratory I	4
CHEM 350 & CHEM 351	Analytical Chemistry and Analytical Chemistry Lab	4
COMM 200	Civil Discourse: Theory & Practice	3
PSYC 105	Introduction to Psychology	3
<b>Hours</b>		<b>14</b>

### Spring

Select one of the following:		3
CHEM 302	Physical Chemistry II (even years)	
CHEM 460	Materials Chemistry (odd years)	
Select one of the following In-Depth Chemistry Electives (lecture and lab):		4
CHEM 337 & CHEM 338	Biochemistry II and Biochemistry Laboratory II	
CHEM 415 & CHEM 416	Forensic Analysis and Forensic Analysis Lab	
CHEM 475	Advanced Organic Synthesis	
CHEM 425 & CHEM 426	Instrumental Analysis and Instrumental Analysis Laboratory	4
CHEM 491	Chemistry Seminar	1
BIOL 330	Microbiology/Lab	3
<b>Hours</b>		<b>15</b>

## Fourth Year

### Fall

CHEM 301 & CHEM 321	Physical Chemistry 1 and Physical Chemistry Laboratory I	4
CHEM 442	Inorganic Chemistry	3
BIOL 216	Anatomy and Physiology I with Lab	3
Inquiry/Thread/Elective Course		3
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>16</b>

**Spring**

Select one of the following:

CHEM 302	Physical Chemistry II (even years)	3
CHEM 460	Materials Chemistry (odd years)	
CHEM 452	Physical Inorganic Chemistry Laboratory	1
BIOL 217	Anatomy and Physiology II with Lab	3
Inquiry/Thread/Elective Course		3
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>13</b>
<b>Total Hours**</b>		<b>122-123</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

\* Students are encouraged to take ESAP 101 as a Free Elective.

Optional ACS Certification requires 2 credits of CHEM 490 and 1 credit of CHEM 496.

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

Major Code: 6118

Concentration Code: CHHS

Revised date: 08.02.2021

## Chemistry, Bachelor of Science (BS) / Pre-Pharmacy (Duquesne) (3+4)

### Pre-Acceptance Requirements

To be considered for the pre-acceptance program at Slippery Rock University, students must:

- Have a minimum high school QPA of 3.0.
- Score a minimum of 1130 on their SAT or 23 on their ACT.
- Demonstrate evidence of leadership potential, community service, and involvement in co-curricular activities.
- Provide one letter of recommendation from either a high school teacher or guidance counselor.

To maintain satisfactory progress in the Duquesne pre-pharmacy program, students must:

- Complete the curricular requirements described in their SRU curriculum guide.
- Earn a letter grade of "C" or better in all courses.
- Maintain a minimum QPA of 2.50.

For the 2+4 program: Students should prepare to take the PCAT but October of their sophomore year at Slippery Rock University.

For the 3+4 program: Students should prepare to take the PCAT but October of their junior year at Slippery Rock University.

Before January 15th of their sophomore year (for the 2+4 option) and their junior year (for the 3+4 option), prospective students must apply to

Duquesne University. In addition to the grade and QPA requirements listed above, formal acceptance in the PharmD program requires that students:

- Attain a PCAT score of 375 or better.
- Participate in an interview process with the Duquesne University School of Pharmacy faculty.
- Submit a letter of recommendation from the SRU Pre-Pharmacy Selection Committee.
- Provide evidence of leadership potential and commitment to the pharmacy profession.

Preference will be granted to candidates who:

- Attain a PCAT score of 400 or better.
- Maintain a QPA of 3.00 or higher for all science and math courses.
- Maintain a cumulative QPA of 3.00 or higher.

## Related Links

Chemistry: Pre-Pharmacy (Duquesne) Program Page ([https://www.sru.edu/academics/majors-and-minors/chemistry-pre-pharmacy-\(duquesne\)/](https://www.sru.edu/academics/majors-and-minors/chemistry-pre-pharmacy-(duquesne)/))

Chemistry Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/chemistry/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Overall GPA: 3.00 or higher Math/Science Course GPA: 3.00 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	43-44
	Natural Science and Math College-Wide Requirements	12

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the 1<sup>st</sup> year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
PHIL 110	Ethics and Civil Discourse	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 225	Calculus I	4
	Subtotal	16
<b>Integrated Inquiry</b>		

*Creative and Aesthetic Inquiry*

Select 3 Credits (p. 29)	3
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*Humanities Inquiry*

Select 3 Credits (p. 29)	3
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*Social Science Inquiry*

Select 3 Credits (p. 29)	3
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*Natural Science Inquiry*

CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
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*Physical Science Inquiry*

PHYS 216	University Physics 1 with Lab	4
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Subtotal	17
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**Thematic Thread**

Select 12 Credits (p. 29) <sup>2</sup>	12
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<b>Total Hours</b>	<b>45</b>
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<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

**Basic Math Requirement**

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3

Meet required minimum SAT or ACT math score OR	
ESAP 110	Beginning Algebra

<b>Total Hours</b>	<b>0-3</b>
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**Computer Competency**

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3

Pass Computer Competency Exam OR	
Select one of the following at SRU or another post-secondary institution:	

CPSC 100	Introduction to Computing for Liberal Arts
CPSC 110	Computer Concepts
CPSC 130	Introduction to Computing and Programming
PE 202	Technology for Wellness

<b>Total Hours</b>	<b>0-3</b>
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**DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT**

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

**Major/Concentration Requirements**

Code	Title	Hours
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**Required Introductory Chemistry Courses**

CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
Subtotal		4

**Required Foundation Chemistry Courses**

CHEM 201	Organic Chemistry I	3
CHEM 211	Organic Chemistry Laboratory I	1
CHEM 335	Biochemistry I	3
CHEM 336	Biochemistry Laboratory I	1
CHEM 350	Analytical Chemistry	3
CHEM 351	Analytical Chemistry Lab	1

Select one of the following:	4
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CHEM 301 & CHEM 321	Physical Chemistry 1 and Physical Chemistry Laboratory I
CHEM 442 & CHEM 452	Inorganic Chemistry and Physical Inorganic Chemistry Laboratory

Subtotal	16
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**Required In-Depth Chemistry Courses**

CHEM 202	Organic Chemistry II	3
CHEM 212	Organic Chemistry Laboratory II	1
CHEM 337	Biochemistry II	3
CHEM 338	Biochemistry Laboratory II	1

Select one of the following:	3-4
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CHEM 302	Physical Chemistry II
CHEM 460	Materials Chemistry
CHEM 425 & CHEM 426	Instrumental Analysis and Instrumental Analysis Laboratory

Subtotal	11-12
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**Cognate Courses**

BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
MATH 230	Calculus II	4
PHYS 217	University Physics 2 with Lab	4
Subtotal	12	

<b>Total Hours</b>	<b>43-44</b>
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\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**Natural Science and Math College-Wide Requirements**

Code	Title	Hours
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
MATH 225	Calculus I	4
PHYS 216	University Physics 1 with Lab	4

## Additional Pre-Pharmacy Prerequisite Courses

Code	Title	Hours
BIOL 250	Genetics with Lab	4
STAT 152	Elementary Statistics I	3

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Chemistry, BS (6118)

Pre-Pharmacy Duquesne 3+4 (61DQ)

This program is effective as of Summer 2022

Revised 07.06.2022

UCC 03.22.2022

## Recommended Three-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
BIOL 104		4
ESAP 101	FYRST Seminar <sup>2</sup>	1
MATH 125	Precalculus	4
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
BIOL 250	Genetics with Lab	4
ENGL 102	Critical Writing	3
MATH 225	Calculus I	4
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
CHEM 201	Organic Chemistry I	3
CHEM 211	Organic Chemistry Laboratory I	1
CHEM 243	Introduction to Research in Chemistry	1
ENGL 104	Critical Reading	3
MATH 230	Calculus II	4
PHYS 211	General Physics I with Lab	4
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
CHEM 202	Organic Chemistry II	3
CHEM 212	Organic Chemistry Laboratory II	1
PHIL 140	World Religions	3

PHYS 217	University Physics 2 with Lab	4
PSYC 105	Introduction to Psychology	3
STAT 152	Elementary Statistics I	3
<b>Hours</b>		<b>17</b>

### Third Year

#### Fall

CHEM 350	Analytical Chemistry	3
CHEM 351	Analytical Chemistry Lab	1
CHEM 335	Biochemistry I	3
CHEM 336	Biochemistry Laboratory I	1
CHEM 442	Inorganic Chemistry	3
Creative & Aesthetic Inquiry (p. 29)		3

**Hours** **14**

#### Spring

CHEM 425	Instrumental Analysis	3
CHEM 426	Instrumental Analysis Laboratory	1
CHEM 452	Physical Inorganic Chemistry Laboratory	1
CHEM 337	Biochemistry II	3
CHEM 338	Biochemistry Laboratory II	1
CHEM 491	Chemistry Seminar	1
CHEM 302 or CHEM 460	Physical Chemistry II or Materials Chemistry	3

**Hours** **13**

**Total Hours\*\*** **91**

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Students are encouraged to take ESAP 101 as a Free Elective.

\* Prepare to take PCAT by October, Fall of Sophomore Year.

Major Code: 61DQ

UCC 02.02.2021

Revised: 08.02.2021

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

## Chemistry, Bachelor of Science (BS) / Pre-Pharmacy (LECOM) (3+3)

Slippery Rock University of Pennsylvania (SLIPPERY ROCK) and Lake Erie College of Osteopathic Medicine (LECOM) School of Pharmacy offer a 3+3 Pre-Pharmacy program that culminates with a BS Chemistry degree from SRU and a Doctor of Pharmacy from LECOM if successfully completed. Under the joint agreement between SLIPPERY ROCK and LECOM School of Pharmacy, students must successfully complete the three-year undergraduate program in chemistry at SLIPPERY ROCK and then matriculate into LECOM School of Pharmacy to complete the professional curriculum of the Doctor of Pharmacy degree (Pharm.D.) in three years. After successfully completing the first full year at LECOM, students can earn a BS Chemistry Degree from SRU.



## Selection of Studies for the Program

For admission to Phase I of the Program, students must fulfill the following requirements:

- SAT Scores (or ACT scores) 1100 (total of 24); New SAT of 1240 or higher is preferred; ACT of 26 or better.
- High School Grade Point Average (GPA) 3.4 out of 4.0
- Class rank Top 25% of the class
- Letters of recommendation are not required by LECOM to enter into EAP
- Potential Evidence of scholarly activities and desire to become a pharmacist

LECOM School of Pharmacy will not accept advanced placement credit of science and mathematics courses into Phase I of the program.

## Admission to Phase II of the Program

The LECOM School of Pharmacy will accept **Slippery Rock** students into the professional pharmacy curriculum who meet the criteria listed below:

- Complete the pre-pharmacy curriculum in Phase I of the 3 + 3 Accelerated Program in Pharmacy as described below (or as amended).
- Earn a minimum GPA of **3.4** in Phase I of the Program. No grade lower than a “C.”
- Earn a GPA of **3.2** or higher for science courses.
- Must maintain *full-time* student status while at **Slippery Rock** and complete the Program in the specified time frame.

Submit two letters of recommendation. One of these letters MUST be from the Health Professions Committee at SLIPPERY ROCK. The letter will address the personal growth of the student during Phase I of the **Program**, as well as the student’s maturity, responsibility, and desire to become a pharmacist.

- Demonstrate leadership potential and commitment to the pharmacy profession.
- Submit a completed application for admission to the LECOM School of Pharmacy.

All questions from students accepted into the 3 + 3 Accelerated Pharmacy Program should be directed to the LECOM School of Pharmacy Admissions Office.

## Conferral of Degrees

The Doctor of Pharmacy (Pharm.D.) degree will be conferred upon successful completion of Phase I and Phase II of the Program, both didactic and clinical, and recommendation by both the administration and faculty of the LECOM School of Pharmacy. Conferral of the Pharm.D. degree will be at the end of the three year professional program in pharmacy at the LECOM School of Pharmacy. The Bachelor of Science (B.S.) degree will be conferred on “3+3” students after completion of all SLIPPERY ROCK requirements which includes completion (*with a C or better*) of all courses in the first semester of year one at LECOM.

## Program Learning Outcomes

- Students will demonstrate knowledge of the main disciplines of chemistry, namely *Organic, Analytical, Biological, Physical, and Inorganic* chemistry.

- Students will demonstrate development of technical skills for practical applications of chemistry.
- Students will present collected experimental data in written and oral reports.
- Students and faculty will participate in faculty-led research projects. Students are expected to be actively working in the laboratory under the supervision and guidance of a faculty mentor.

## Related Links

Chemistry - Pre-Pharmacy, BS Program Page ([https://www.sru.edu/academics/majors-and-minors/chemistry-biochemistry-pre-pharmacy-33-\(lecom\)/](https://www.sru.edu/academics/majors-and-minors/chemistry-biochemistry-pre-pharmacy-33-(lecom)/))

Chemistry Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/chemistry/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	47
	Natural Science and Math College-Wide Requirements	12
	Electives	16

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 225	Calculus I <sup>2</sup>	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16

### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3

**Natural Sciences Inquiry**

CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab <sup>2</sup>	4
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**Physical Sciences Inquiry**

PHYS 216	University Physics 1 with Lab <sup>2</sup>	4
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Subtotal		17
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**Thematic Thread**

Select 12 Credits (p. 29) <sup>3</sup>		12
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<b>Total Hours</b>		<b>45</b>
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<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> Course counts for 50% of Major requirements and Major GPA

<sup>3</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

**Basic Math Requirement**

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

**Computer Competency**

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

**DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT**

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

**Major Requirements**

- Students may not withdraw from any course.
- Please meet with adviser for Rock Studies 2 recommended courses for Pre-Pharmacy
- Recommended Rock Studies 2 Courses:

- ECON 201 OR ECON 202
- PSYC 105 OR INDP 201

Code	Title	Hours
<b>Required Courses</b>		
CHEM 108	General Chemistry II <sup>1</sup>	3
CHEM 112	General Chemistry II Lab <sup>1</sup>	1
CHEM 201	Organic Chemistry I <sup>1</sup>	3
CHEM 211	Organic Chemistry Laboratory I <sup>1</sup>	1
CHEM 202	Organic Chemistry II <sup>1</sup>	3
CHEM 212	Organic Chemistry Laboratory II <sup>1</sup>	1
CHEM 301	Physical Chemistry I <sup>1</sup>	3
CHEM 321	Physical Chemistry Laboratory I <sup>1</sup>	1
CHEM 335	Biochemistry I <sup>1</sup>	3
CHEM 336	Biochemistry Laboratory I <sup>1</sup>	1
CHEM 337	Biochemistry II	3
CHEM 338	Biochemistry Laboratory II	1
Subtotal		24

**Chemistry Electives**

Select one of the following:		4
CHEM 350 & CHEM 351	Analytical Chemistry and Analytical Chemistry Lab <sup>1</sup>	
CHEM 425 & CHEM 426	Instrumental Analysis and Instrumental Analysis Laboratory <sup>1</sup>	
Subtotal		4

**Required Math and Science Courses**

BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab <sup>1</sup>	4
BIOL 250	Genetics with Lab <sup>1</sup>	4
MATH 230	Calculus II <sup>1</sup>	4
PHYS 217	University Physics 2 with Lab <sup>1</sup>	4
STAT 152	Elementary Statistics I <sup>1</sup>	3
Subtotal		19

<b>Total Hours</b>		<b>47</b>
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<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**Natural Science and Math College-Wide Requirements**

Code	Title	Hours
CHEM 107	General Chemistry I <sup>1</sup>	3
CHEM 111	General Chemistry I Lab <sup>1</sup>	1
MATH 225	Calculus I <sup>1</sup>	4
PHYS 216	University Physics 1 with Lab <sup>1</sup>	4

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

**Co-curricular and Experiential Learning**

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes (e.g., Organic Chemistry II Lab)
2. Student-faculty research
3. Student leadership development (Chemistry Club)
4. Career education and development
5. Internships
6. Student teaching (serve as Lab Assistants and tutors)
7. Volunteering

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

CHEMISTRY - BS (6118)

Biochemistry w/3+3 Pre-Pharmacy (61P4)

This program is effective as of Summer 2022

Revised 07.06.2022

UCC 03.22.2022

## Recommended Three-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
Select one of the following:		3-4
MATH 120	Intermediate Algebra (if necessary)	
MATH 125	Precalculus (if necessary)	
MATH 225	Calculus I (if necessary)	
MATH 230	Calculus II	
BIOL 104		4
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>15-16</b>
<b>Spring</b>		
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
Select one of the following:		4
MATH 125	Precalculus (if necessary)	
MATH 225	Calculus I (if necessary)	
MATH 230	Calculus II	
ENGL 102	Critical Writing	3
BIOL 250	Genetics with Lab	4
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>18</b>

## Second Year

### Fall

CHEM 201 & CHEM 211	Organic Chemistry I and Organic Chemistry Laboratory I	4
Select one of the following:		4
MATH 225	Calculus I (if necessary)	
MATH 230	Calculus II	
PHYS 216	University Physics 1 with Lab	4
ENGL 104	Critical Reading	3
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>18</b>

### Spring

CHEM 202 & CHEM 212	Organic Chemistry II and Organic Chemistry Laboratory II	4
MATH 230	Calculus II	4
PHYS 217	University Physics 2 with Lab	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
STAT 152	Elementary Statistics I	3
<b>Hours</b>		<b>18</b>

## Third Year

### Fall

CHEM 301 & CHEM 321	Physical Chemistry 1 and Physical Chemistry Laboratory I	4
CHEM 335 & CHEM 336	Biochemistry I and Biochemistry Laboratory I	4
CHEM 350 & CHEM 351	Analytical Chemistry and Analytical Chemistry Lab	4
Inquiry/Thread/Elective Course		3
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>18</b>

### Spring

CHEM 337 & CHEM 338	Biochemistry II and Biochemistry Laboratory II	4
Inquiry/Thread/Elective Course		3
Inquiry/Thread/Elective Course		3
Inquiry/Thread/Elective Course		3
Inquiry/Thread/Elective Course		3
<b>Hours</b>		<b>16</b>
<b>Total Hours**</b>		<b>103-104</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6118

Concentration Code: 61P4

Revised date: 08.02.2021

## Chemistry, Bachelor of Science (BS) / Pre-Physician Assistant (SRU) (3+2)

### Program Learning Outcomes

- Students will demonstrate knowledge of the main disciplines of chemistry, namely *Organic, Analytical, Biological, Physical, and Inorganic* chemistry. (SRU UG 2, 3, 4)
- Students will demonstrate development of technical skills for practical applications of chemistry. (SRU UG 2, 3, 4, 5)
- Students will present collected experimental data in written and oral reports. (SRU UG 1, 2, 3, 4, 5, 10)
- Students and faculty will participate in faculty-led research projects. Students are expected to be actively working in the laboratory under the supervision and guidance of a faculty mentor. (SRU UG 1, 2, 3, 4, 5, 7, 8, 9, 10)

## What are your options?

**Pre-Physician Assistant SRU 3+2:** Earn a Master of Science degree in Physician Assistant Studies in five years rather than six. In the first three years, you complete your major courses and pre-requisites for the SRU PA program. At the end of your second year, you apply for admission into the SRU PA program. If accepted, your first year in the SRU PA program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Physician Assistant (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU PA program and apply to the SRU PA program in your senior year.

## Related Links

Chemistry - Pre-Physician Assistant, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/chemistry-pre-physician-assistant/>)

Chemistry Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/chemistry/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

#### 1st Major: Chemistry

- Overall GPA: 2.00 or higher
- Major GPA (includes Major Requirements and College Wide Requirements): 2.00 or higher

#### 2nd Major: Pre-PA SRU 3+2 Chemistry

- Overall GPA: 3.00 or higher (before Fall 2018)
- Overall GPA: 3.25 or higher (Fall 2018 and after)

## Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	48
	Natural Science and Math College-Wide Requirements	12
	Electives	27

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the 1<sup>st</sup> year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 225	Calculus I	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	4
& CHEM 111	and General Chemistry I Lab <sup>2</sup>	
<i>Physical Sciences Inquiry</i>		
PHYS 216	University Physics 1 with Lab <sup>2</sup>	4
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>3</sup>		12
<b>Total Hours</b>		<b>45</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> Course counts for 50% of Major requirements and Major GPA

<sup>3</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- 24 major credits must be taken at SRU or PASSHE
- 24 major credits must be taken at the 300 level or above
- If you choose to pursue Pre-Physician Assistant SRU 3+2 Chemistry and are not accepted into the PA program, then CHEM 302, CHEM 425, CHEM 426, and CHEM 460 are required to complete a first major in Chemistry. In this case, CHEM 425/CHEM 426 cannot count towards the Additional Required-In-Depth Course Requirement. Please refer to the Chemistry Curriculum Guide.

Code	Title	Hours
<b>Required Introductory Chemistry Courses</b>		
CHEM 108	General Chemistry II <sup>1</sup>	3
CHEM 112	General Chemistry II Lab <sup>1</sup>	1
Subtotal		4
<b>Required Foundation Chemistry Courses</b>		
CHEM 201	Organic Chemistry I <sup>1</sup>	3
CHEM 211	Organic Chemistry Laboratory I <sup>1</sup>	1
CHEM 301	Physical Chemistry I <sup>1</sup>	3
CHEM 321	Physical Chemistry Laboratory I <sup>1</sup>	1
CHEM 335	Biochemistry I <sup>1</sup>	3
CHEM 336	Biochemistry Laboratory I <sup>1</sup>	1
CHEM 350	Analytical Chemistry <sup>1</sup>	3
CHEM 351	Analytical Chemistry Lab <sup>1</sup>	1
CHEM 442	Inorganic Chemistry <sup>1</sup>	3

CHEM 452	Physical Inorganic Chemistry Laboratory <sup>1</sup>	1
Subtotal		20

### Required In-Depth Chemistry Courses

CHEM 202	Organic Chemistry II <sup>1</sup>	3
CHEM 212	Organic Chemistry Laboratory II <sup>1</sup>	1
CHEM 337	Biochemistry II <sup>1</sup>	3
CHEM 338	Biochemistry Laboratory II <sup>1</sup>	1
Subtotal		8

### Additional Required In-Depth Chemistry Courses

Select four credits (must include one lecture and one lab):		4
CHEM 340	Air Quality Assessment <sup>1</sup>	
CHEM 370	Water Quality Assessment <sup>1</sup>	
CHEM 415	Forensic Analysis <sup>1</sup>	
CHEM 416	Forensic Analysis Lab <sup>1</sup>	
CHEM 425	Instrumental Analysis	
CHEM 426	Instrumental Analysis Laboratory <sup>1</sup>	
CHEM 475	Advanced Organic Synthesis <sup>1</sup>	
Subtotal		4

### Cognate Courses

BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab <sup>1</sup>	4
MATH 230	Calculus II <sup>1</sup>	4
PHYS 217	University Physics 2 with Lab <sup>1</sup>	4
Subtotal		12
<b>Total Hours</b>		<b>48</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
CHEM 107	General Chemistry I <sup>1</sup>	3
CHEM 111	General Chemistry I Lab <sup>1</sup>	1
MATH 225	Calculus I <sup>1</sup>	4
PHYS 216	University Physics 1 with Lab <sup>1</sup>	4

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

## Additional Physician Assistant Prerequisite Courses

Code	Title	Hours
BIOL 250	Genetics with Lab	4
BIOL 330	Microbiology/Lab	3
EXSC 250	Medical Terminology	3
or HCAM 250	Medical Terminology for Healthcare Administrators	
STAT 152	Elementary Statistics I	3
BIOL 209		4
BIOL 309		4

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:



1. High-Impact Practice (HIP) designated classes (e.g., Organic Chemistry II Lab)
2. Student-faculty research
3. Student leadership development (Chemistry Club)
4. Career education and development
5. Internships
6. Student teaching (serve as Lab Assistants and tutors)
7. Volunteering

## Physician Assistant Studies (Master of Science in Physician Assistant Studies)

### Prerequisite Admission Requirements – Pre- Physician Assistant 3+2

#### For Application Requirements

Please refer to Slippery Rock University's Physician Assistant Studies (Master of Science in Physician Assistant Studies) website for requirements: <http://www.sru.edu/pa> (<http://www.sru.edu/pa/>)

#### Rock Studies 2

Code	Title	Hours
<b>Prerequisite Courses - SRU Physician Assistant</b>		
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 210 or BIOL 330	Medical Microbiology with Lab Microbiology/Lab	3
BIOL 209		4
BIOL 309		4
BIOL 250	Genetics with Lab	4
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
CHEM 201	Organic Chemistry I	3
EXSC 250 or HCAM 250	Medical Terminology Medical Terminology for Healthcare Administrators	3
PSYC 105	Introduction to Psychology	3
Inferential Statistics Course <sup>1</sup>		3
<b>Total Hours</b>		<b>39</b>

<sup>1</sup> Any statistics course with inferential statistics embedded. See My Rock Audit for specific courses.

#### Pre-Physician Assistant SRU 3+2 Requirements

If any of these requirements are not met, the 3+2 designation will be removed from the student's record:

1. A 3.25 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Physician Assistant SRU 3+2 program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

#### Provision

Should a Pre-Physician Assistant SRU 3+2 student be unsuccessful in completing the 1<sup>st</sup> two semesters (summer or fall) of the Physician Assistant Program and wants to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, Physician Assistant courses

will count toward the completion of his/her undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the Physician Assistant Studies Program with an earned Bachelor's degree.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

CHEMISTRY - BS (6118)

PRE-PA 3+2 (6SPC)

This program is effective as of Summer 2022

Revised 07.06.2022

UCC 03.22.2022

## Chemistry, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

### Related Links

Chemistry, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/chemistry-bs/>)

Chemistry Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/chemistry/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (coursed numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Chemistry Courses</b>		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
CHEM 201	Organic Chemistry I	3
CHEM 211	Organic Chemistry Laboratory I	1
<b>Electives</b>		
Choose from the following:		4

CHEM 202	Organic Chemistry II
CHEM 212	Organic Chemistry Laboratory II
CHEM 350	Analytical Chemistry
CHEM 351	Analytical Chemistry Lab
Choose from the following:	
CHEM 301	Physical Chemistry I
CHEM 321	Physical Chemistry Laboratory I
CHEM 335	Biochemistry I
CHEM 336	Biochemistry Laboratory I
CHEM 340	Air Quality Assessment
CHEM 370	Water Quality Assessment
Choose from the following:	
CHEM 302	Physical Chemistry II
CHEM 337	Biochemistry II
CHEM 338	Biochemistry Laboratory II
CHEM 415	Forensic Analysis
CHEM 416	Forensic Analysis Lab
CHEM 425	Instrumental Analysis
CHEM 426	Instrumental Analysis Laboratory
CHEM 442	Inorganic Chemistry
CHEM 452	Physical Inorganic Chemistry Laboratory
CHEM 460	Materials Chemistry
CHEM 475	Advanced Organic Synthesis
CHEM 490	Independent Study

**Total Hours** **24**

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN CHEMISTRY (12A)

This program is effective as of Fall 2007.

Revised 8-2019

# Chemistry, Pre-Pharmacy (Duquesne) (2+4)

## Pre-Acceptance Requirements

To be considered for the pre-acceptance program at Slippery Rock University, students must:

- Have a minimum high school QPA of 3.0.
- Score a minimum of 1130 on their SAT or 23 on their ACT.

- Demonstrate evidence of leadership potential, community service, and involvement in co-curricular activities.
- Provide one letter of recommendation from either a high school teacher or guidance counselor.

To maintain satisfactory progress in the Duquesne pre-pharmacy program, students must:

- Complete the curricular requirements described in their SRU curriculum guide.
- Earn a letter grade of "C" or better in all courses.
- Maintain a minimum QPA of 2.50.

For the 2+4 program: Students should prepare to take the PCAT but October of their sophomore year at Slippery Rock University.

For the 3+4 program: Students should prepare to take the PCAT but October of their junior year at Slippery Rock University.

Before January 15th of their sophomore year (for the 2+4 option) and their junior year (for the 3+4 option), prospective students must apply to Duquesne University. In addition to the grade and QPA requirements listed above, formal acceptance in the PharmD program requires that students:

- Attain a PCAT score of 375 or better.
- Participate in an interview process with the Duquesne University School of Pharmacy faculty.
- Submit a letter of recommendation from the SRU Pre-Pharmacy Selection Committee.
- Provide evidence of leadership potential and commitment to the pharmacy profession.

Preference will be granted to candidates who:

- Attain a PCAT score of 400 or better.
- Maintain a QPA of 3.00 or higher for all science and math courses.
- Maintain a cumulative QPA of 3.00 or higher.

## Related Links

Chemistry: Pre-Pharmacy (Duquesne) Program Page ([https://www.sru.edu/academics/majors-and-minors/chemistry-pre-pharmacy-\(duquesne\)/](https://www.sru.edu/academics/majors-and-minors/chemistry-pre-pharmacy-(duquesne)/))

Chemistry Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/chemistry/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Overall GPA: 3.00 or higher Math/Science Course GPA: 3.00 or higher

### Summary

Code	Title	Hours
	Rock Studies 2 Requirements	33
	Other Basic Requirements	0-3
	Computer Competency	0-3

Major/Concentration Requirements	24
Natural Science and Math College-Wide Requirements	12

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
PHIL 110	Ethics and Civil Discourse	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 225	Calculus I	4
Subtotal		16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Science Inquiry</i>		
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
<i>Physical Science Inquiry</i>		
PHYS 216	University Physics 1 with Lab	4
Subtotal		17
<b>Total Hours</b>		<b>33</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

Code	Title	Hours
<b>Required Introductory Chemistry Courses</b>		
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
Subtotal		4
<b>Required Foundation Chemistry Courses</b>		
CHEM 201	Organic Chemistry I	3
CHEM 211	Organic Chemistry Laboratory I	1
Subtotal		4
<b>Required In-Depth Chemistry Courses</b>		
CHEM 202	Organic Chemistry II	3
CHEM 212	Organic Chemistry Laboratory II	1
Subtotal		4
<b>Cognate Courses</b>		
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
MATH 230	Calculus II	4
PHYS 217	University Physics 2 with Lab	4
Subtotal		12
<b>Total Hours</b>		<b>24</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
MATH 225	Calculus I	4
PHYS 216	University Physics 1 with Lab	4

## Additional Pre-Pharmacy Prerequisite Courses

Code	Title	Hours
BIOL 250	Genetics with Lab	4
PHIL 110	Ethics and Civil Discourse	3
PHIL 140	World Religions	3
PSYC 105	Introduction to Psychology	3
STAT 152	Elementary Statistics I	3

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information*

on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

Chemistry/Pre-Pharmacy Duquesne 2+4 (61DP)

This program is effective as of Summer 2022

Revised 07.06.2022

UCC 03.22.2022

## Recommended Two-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
BIOL 104		4
MATH 125	Precalculus	4
ESAP 101	FYRST Seminar <sup>2</sup>	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
BIOL 250	Genetics with Lab	4
ENGL 102	Critical Writing	3
MATH 225	Calculus I	4
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
CHEM 201	Organic Chemistry I	3
CHEM 211	Organic Chemistry Laboratory I	1
CHEM 243	Introduction to Research in Chemistry	1
ENGL 104	Critical Reading	3
MATH 230	Calculus II	4
PHYS 216	University Physics 1 with Lab	4
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
CHEM 202	Organic Chemistry II	3
CHEM 212	Organic Chemistry Laboratory II	1
PHIL 140	World Religions	3
PHYS 216	University Physics 1 with Lab	4
PSYC 105	Introduction to Psychology	3
STAT 152	Elementary Statistics I	3
<b>Hours</b>		<b>17</b>
<b>Total Hours**</b>		<b>64</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Students are encouraged to take ESAP 101 as a Free Elective.

\* Prepare to take PCAT by October, Fall of Sophomore Year.

Major Code: 61DP

UCC 02.02.2021

Revised: 08.02.2021

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

## Computer Science

Chair	Assistant Chair	Secretary	Location	Department Phone
Dr. Sam Thangiah	Dr. Raed Seetan	Vicki Sparano	275 Advanced Technology and Science Hall	724-738-2040

Department Web Site URL (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/computer-science/>)

Department Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/compsci-fs.pdf>)

Cybersecurity Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/Cybersecurity-fs.pdf>)

## Faculty

### Naresh Adhikari

Assistant Professor

Computer Science

Ph.D., Mississippi State University

M.S., Mississippi State University

B.E., Pokhara University

### Sidney Faber

Instructor

Computer Science

M.S., University of Pittsburgh

B.S., Penn State University

B.S., Penn State University

### John Franolich

Instructor

Computer Science

M.S., University of Pittsburgh

B.S., University of Pittsburgh

### Linwu Gu

Associate Professor

Computer Science

### Kwang Lee

Assistant Professor

Computer Science

Ph.D., Rensselaer Polytechnic Institute

M.S., Texas A&M University

M.B.A., Ajou University

B.S., Ajou University

### Roger Lutz

Instructor

Computer Science

M.B.A., Indiana University of PA  
B.S., Robert Morris University

#### **Raed Seetan**

Associate Professor  
Computer Science  
Ph.D., North Dakota State University  
M.S., Jordan University of Science and Technology  
B.S., Jordan University of Science and Technology

#### **Nitin Sukhija**

Associate Professor  
Computer Science  
D.C.Sc., Mississippi State University  
M.C.S., National University  
M.B.A., San Diego State University  
B.E., Maharshi Dayanand University

#### **Sam Thangiah**

Professor  
Computer Science  
Ph.D., North Dakota State University  
M.S., North Dakota State University  
B.S., Slippery Rock University

#### **Abdullah Wahbeh**

Associate Professor  
Computer Science  
D.S., Dakota State University  
M.S., Dakota State University  
M.S., Yarmouk University  
B.S., Yarmouk University

#### **Deborah Whitfield**

Professor  
Computer Science  
Ph.D., University of Pittsburgh  
M.S., University of Pittsburgh  
B.S., Youngstown State University

#### **Hongbo Zhou**

Associate Professor  
Computer Science  
Ph.D., Michigan State University  
M.S., Xi'an Jiaotong University (China)  
B.S., Xi'an Jiaotong University (China)

## **Programs**

### **Majors**

- Computing, Bachelor of Science (BS) - Concentration in Computer Science (p. 414)
- Computing, Bachelor of Science (BS) - Concentration in Computer Science with Concentration in Bioinformatics (p. 417)
- Computing, Bachelor of Science (BS) - Concentration in Computing Analytics (p. 420)
- Computing, Bachelor of Science (BS) - Concentration in Information Technology (p. 423)
- Cybersecurity, Bachelor of Science (BS) - Concentration in Secure Software Development (p. 427)
- Cybersecurity, Bachelor of Science (BS) - Concentration in Security Governance (p. 430)

### **minors**

- Computing, Minor (p. 426)
- Cybersecurity, Minor (p. 432)
- Health Informatics, Minor (p. 433)

### **certificates**

- Big Data Science, Certificate (p. 414)

## **Courses**

### **CPSC Courses**

#### **CPSC 099 - Computer Competency Exam**

This non-credit course is used to identify students who have met the university's computer competency requirement by earning a passing grade on the Computer Competency Placement Test.

Credits: 0

#### **CPSC 100 - Introduction to Computing for Liberal Arts**

A pass/no credit course to provide an introduction to the computer capabilities needed to succeed in an Information Society. This course is designed to support the SRU Computer Competency requirement. Topics will include computer hardware, software, networking, security and privacy, and societal issues.

Credits: 1

Term(s) Typically Offered: Offered Every Term

#### **CPSC 102 - Collaborative Information Technology and Society**

We will explore how the use of collaborative information technology impacts human interaction in globally diverse contexts. The course provides an introduction to the historical development, current use and future directions of collaborative technology in human societies. We will address how to manage and protect personal computing devices and communication, along with the ethical, legal and social issues involved in the use of these collaborative technologies.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

#### **CPSC 110 - Computer Concepts**

A computer literacy course stressing the use of application software on personal computers. It covers a survey of computers and their impact on society and the use of word processing software. Other application software is also covered, such as spreadsheets and database software, but the particular applications examined may vary from section to section.

Credits: 3

Term(s) Typically Offered: Offered Every Term



**CPSC 125 - 3D Modeling for Computing**

This course introduces students to 3D modeling for applications in computing fields. It covers the basic and intermediate features in 3D modeling software tools, which are utilized in applications such as 3D visualization, 3D animation, virtual reality/augmented reality, and 3D game design. This course also introduces students to the printing of 3D objects.

Prerequisites: CPSC 100<sup>D</sup> or CPSC 110<sup>D</sup> or CPSC 130<sup>D</sup> or PE 202<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**CPSC 130 - Introduction to Computing and Programming**

An introductory course devoted to programming and to a description of hardware and software concepts. Programming concepts covered include top-down program development using pseudocode, algebraic notation, standard control structures, and arrays in an appropriate programming language. Other topics include binary representation, storage, and general architecture and functioning of a computer system. Keywords: computer science

Prerequisites: (ACSD 110<sup>D</sup> or ESAP 110<sup>D</sup>) or minimum score of 18 in 'Math ACT Exc 2 - EX110-PL MATH' or minimum score of 421 in 'Math SAT Exc 2 - EX110-PL MATH'  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**CPSC 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**CPSC 140 - Introduction to Programming Principles**

Techniques are stressed that enable systematic development of clear, correct programs. Other topics include data types, algebraic notation, standard control structures, functions; input/output, arrays, and program testing and debugging. This course will be taught in C++.

Prerequisites: (ACSD 110<sup>D</sup> or ESAP 110<sup>D</sup>) or minimum score of 18 in 'Math ACT Exc 2 - EX110-PL MATH' or minimum score of 421 in 'Math SAT Exc 2 - EX110-PL MATH'  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**CPSC 146 - Programming Principles**

Techniques are stressed that enable systematic development of clear, correct programs. Other topics include data types, algebraic notation, standard control structures, functions; input/output, arrays, and program testing and debugging. Programs will be written in the department's current official programming language of instruction.

Prerequisites: (ACSD 110<sup>C</sup> or ESAP 110<sup>C</sup>) or minimum score of 18 in 'Math ACT Exc 2 - EX110-PL MATH' or minimum score of 421 in 'Math SAT Exc 2 - EX110-PL MATH'  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**CPSC 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CPSC 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**CPSC 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CPSC 207 - Shell Commands and Scripting**

This course introduces the student to the shell commands and shell programming in prevalent operating systems (OS). The architecture of the PC and how it relates to the OS is discussed conceptually and physically examined. The hardware and software required for data communication are discussed.

Prerequisites: CPSC 130<sup>D</sup> or CPSC 146<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**CPSC 210 - Productivity Software**

An in-depth, practical study of existing productivity software packages that focuses primarily on decision-support systems for microcomputers. Projects will involve the use of intermediate and advanced features of various software packages, as well as the use of several packages in finding computer-based solutions to information storage and retrieval problems.

Prerequisites: CPSC 100<sup>P</sup> or CPSC 110<sup>D</sup> or CPSC 099<sup>D</sup> or CPSC 130<sup>D</sup> or minimum score of 01 in 'Computer Competency Exam'  
<sup>P</sup> Requires minimum grade of P.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**CPSC 217 - Advanced Web Programming**

This course continues the coverage of JavaScript features for creating web pages with DOM features. Advanced topics are discussed including CSS scripting, arrays, functions, the creation and utilization of objects, mouse and browser events, pop-up windows, and forms. This course prepares students to learn spin-off languages and introduces the use of 3rd party libraries and APIs.

Prerequisites: CPSC 130<sup>D</sup> and CPSC 146<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**CPSC 236 - Selected Computer Languages**

A selected prevalent computer language(s) other than those taught regularly in other Computer Science courses will be studied and used for programming. Topics will include data structure, control structures, data control, modularization and other features of the language. Special applications, if any, of the language will be studied. The student is expected to have basic programming experience in at least one other language. For different languages, this course may be repeated for credit toward graduation, but not toward Computing major or minor.

Prerequisites: CPSC 130<sup>D</sup> or CPSC 146<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**CPSC 237 - Mobile App Development for Smart Devices**

This course is a practical and comprehensive approach to designing, building, testing, and deploying mobile applications on mobile devices. Students build mobile applications that leverage device features and 3rd party application programming interfaces (APIs) to create stable and robust software. Topics covered include application design, memory constraints, input methods, data handling, interfacing with device APIs and connectivity.

Prerequisite: CPSC 217<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**CPSC 246 - Advanced Programming Principles**

This course places its emphasis on data and their role in software development. Such a study relies on a two-step approach to data abstraction. In the first step, data must be viewed as abstract objects. These objects are selected and specified so as to be useful in the solution of programming projects. In the second step, the abstract objects are translated into program data structures. An extensive examination of data structures provides the student many opportunities to explore the issues of implementing data abstractions. This course will be taught in C++ and will include an introduction to Unix/Linux.

Prerequisites: CPSC 146<sup>D</sup> and (MGMT 219<sup>D</sup> or ECON 219<sup>D</sup> or BUSA 219<sup>D</sup> or MATH 125<sup>D</sup> or MATH 152<sup>D</sup> or STAT 152<sup>D</sup> or MATH 225<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**CPSC 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CPSC 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**CPSC 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CPSC 300 - Challenges of Computer Technology**

An in-depth study of the critical issues related to the computerization of society. Ethical, legal, and moral issues raised by the evolution of computer technology will be discussed.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 301 - Practical Computer Security**

This course is a practical introduction to the threats present to the online, electronic community, and how to protect yourself and your organization from them. We will explore the connectivity structure of the Internet, along with the security and criminal threats to members of the online community. The legal, ethical, and technical issues related to threats such as viruses, worms, and identity theft will be covered.

Prerequisites: CPSC 099<sup>D</sup> or CPSC 110<sup>D</sup> or CPSC 130<sup>D</sup> or CPSC 100<sup>P</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>P</sup> Requires minimum grade of P.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 305 - Introduction to Expert Systems**

An overview of the purpose, structure, and applications of expert systems. Topics covered will include expert systems technology, knowledge engineering, applications of expert systems, expert systems development, and the future of expert systems.

Prerequisites: CPSC 100<sup>P</sup> or CPSC 110<sup>D</sup> or CPSC 130<sup>D</sup> or CPSC 099<sup>D</sup>

<sup>P</sup> Requires minimum grade of P.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 311 - Discrete Computational Structures**

Introduces computational implementations of the mathematical structures most frequently used in computing including sets, equivalence relations, functions, graphs, trees and standard logic. Also introduces automata, formal languages, countability, decidability and computational complexity, Markov and stochastic processes. The course will stress traditional programming and mathematical approaches to these structures such as the use of recursion, elementary data structure, and proof techniques to instantiate, parse, traverse, demonstrate correctness, or use these computational objects.

Prerequisites: MATH 125<sup>D</sup> and CPSC 146<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 315 - Internet of Things (IoT)**

This course introduces the students to digital electronics and programming based on popular single-board microcontroller and single-board computer system platforms to interact with the environment. Sensors and actuators are utilized for communication and applications in the internet of things (IoT), smart homes, robotics, cyber-physical systems and sensor networks. Topics include the architecture of single-board microcontroller and single-board computer system, basic electricity and electronics, IoT building blocks, connections and configuration, and programming.

Prerequisites: CPSC 146<sup>D</sup> and CPSC 207<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 317 - Server-Side Scripting**

This course emphasizes programming using scripting languages for the purpose of creating the back-end of web applications. A variety of languages and utilities available on the web server are covered. The student is expected to have programming experience, knowledge of the Unix/Windows environments, and knowledge of database.

Prerequisites: CPSC 217<sup>D</sup> and CPSC 207<sup>D</sup> and CPSC 323<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 323 - Fundamentals of Database Systems**

A practical approach to analysis, design, and implementation of database systems. This course covers topics such as: conceptual, logical and physical data models; relational database and relational algebra; building and mapping entity relationship diagrams (ERDs); normalization; basic and advanced Structured Query Language (SQL) for data retrieval and manipulation; functions, triggers, and procedures; transactions and concurrency control; security, backup, and recovery procedures.

Prerequisites: CPSC 130<sup>D</sup> or CPSC 146<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 327 - Administration and Security**

Students will learn administration techniques for at least two popular computer operating systems, with special attention to system security. Techniques for managing networking, remote printing, storage allocation, account management, and backup will be discussed. Common techniques for breaching system security, and methods of defense against such attacks, will be emphasized.

Prerequisites: CPSC 207<sup>D</sup> and (CPSC 246<sup>D</sup> or CPSC 217<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 333 - Introduction to Computer Forensics**

This is a fundamental course which covers computer forensics. This class covers methods and tools for gaining forensic information from computer systems and networks. It includes case studies of cybercrimes as well as the application and management of cyber forensics. The course introduces students to forensics tools using hands-on experience and the Internet.

Prerequisites: CPSC 099<sup>P</sup> or CPSC 100<sup>P</sup> or CPSC 110<sup>D</sup> or CPSC 130<sup>D</sup> or CPSC 210<sup>D</sup> or PE 202<sup>D</sup> or MIS 210<sup>D</sup>

<sup>P</sup> Requires minimum grade of P.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 337 - Introduction to Web Graphics**

This course will expose the student to the standards for Web and mobile graphics such as SVG, CSS and canvas. Topics include color models, coordinate systems, coordinate transformations and popular image formats. Differences between vector and pixel-based approaches and between declarative and scripted models of graphical content creation are also covered.

Prerequisites: CPSC 217<sup>D</sup> or (CPSC 130<sup>D</sup> and CPSC 246<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 342 - Introduction to Bioinformatics**

It is a practical course that introduces a wide range of bioinformatics tools, algorithms and biological databases. A broad array of topics in Bioinformatics will be covered such as: overview of Bioinformatics, biological databases, sequence alignment, multiple sequence alignment, molecular phylogeny and evolution, gene expression analysis, protein structure and genome mapping.

Prerequisites: BIOL 250<sup>C</sup> and (BIOL 104<sup>C</sup> or (BIOL 101<sup>C</sup> and BIOL 100<sup>C</sup>))

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 358 - Simulation**

Models of real-life phenomena are programmed with a current simulation language. These are run and adjusted for accurate prediction and explanation. Other simulation languages are surveyed, and needed statistical background is reviewed.

Prerequisites: CPSC 146<sup>D</sup> and (ECON 219<sup>D</sup> or MGMT 219<sup>D</sup> or MATH 152<sup>D</sup> or MATH 352<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 370 - Computer Organization and Architecture**

This course will study computer organization topics such as data representation, Boolean logic, memory hierarchy, and data path design. It will study computer architecture topics such as CPU control, pipelining and instruction set architecture. The course will also introduce the architecture and software models involved in parallel computing. Students will learn the assembly level machine organization by means of a standard assembly language.

Prerequisites: CPSC 150<sup>D</sup> or CPSC 246<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 374 - Algorithms and Data Structures**

This course establishes a foundation for the systematic study of algorithms and data structures. The integration of these two concepts into a single organizational structure emphasizes that algorithms and data structures are inseparably inter-twined. This course builds and elaborates on the concepts introduced in CPSC 246. This course will be taught in a language other than that used in CPSC 246.

Prerequisites: CPSC 246<sup>D</sup> and CPSC 311<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 376 - Programming Language and Theory**

Programming languages are studied from the theoretical viewpoint. The goal is deeper understanding of the design and translation of computer languages. Topics include compilation, automata and formal languages, computability by Turing machines and recursive functions, uncomputability, data types, data structures, binding scope, control mechanisms, conversions, storage management, reliability, portability, modularity, documentation, implementation methods and language extensibility.

Prerequisites: CPSC 150<sup>D</sup> or CPSC 246<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 378 - Theory of Computation**

Both the classical and the contemporary theories of computation will be discussed in this course. The topics covered include the theory of automata and formal languages, computability by Turing machines and recursive functions, uncomputability, and proof of correctness of code.

Prerequisites: CPSC 311<sup>D</sup> or MATH 131<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Prerequisites: CPSC 150<sup>D</sup> or CPSC 246<sup>D</sup> or CPSC 217<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 405 - Data Mining & Analysis**

This course provides a survey of data analysis and data mining techniques for finding patterns in data. It will emphasize using data models, data gathering and storage, selection and preparing of data, model building and testing and interpreting and validating results. If the student takes CPSC 405 for the undergraduate program, he/she can take CPSC 605 for additional credits.

Prerequisite: CPSC 323<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Students cannot enroll who have a program in Health Informatics.

**CPSC 406 - Data Visualization**

This course provides a survey of techniques for visualizing patterns in data. The course will emphasize modern and traditional methods for data visualization, including interactive visualization for data sets too large to display statically. If the student takes CPSC 406 for the undergraduate program, he/she can take CPSC 606 for additional credits.

Prerequisites: (MATH 152<sup>D</sup> or STAT 152<sup>D</sup>) and CPSC 146<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 415 - Advanced Bioinformatics**

Advanced topics in Bioinformatics will be discussed in this course including: motif searching, biological networks analysis, next generation sequencing data analysis, programming for genomic data analysis, Data Mining techniques for biology problems such as Clustering of gene expression data, and Classification for protein function prediction.

Prerequisite: CPSC 342<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

**CPSC 417 - Advanced Web Technologies**

This course emphasizes up-to-date technologies that enable the development of interactive Web applications. New Web standards and their applications and development toolkits will be exemplified. Advanced concepts in scripting languages for the Unix and Windows environments will be discussed.

Prerequisite: CPSC 317<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 423 - Computer Networks**

This is an introduction to computer networks and data communications.

Course content includes: the layered model; transmission and multiplexing; data link protocols; packet, point-to-point, and satellite transmission; local area networks; security and privacy. Examples of some well-known networks will be studied.

Prerequisites: CPSC 150<sup>D</sup> or CPSC 246<sup>D</sup> or CPSC 217<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 427 - IT Capstone Project**

This Information Technology majors' course uses graphical user interface design concepts to introduce interface design possibilities.

This senior-level course requires students to produce an intricate interface that utilizes systems design, information management, systems administration and security, and programming concepts from lower-level courses. This course is intended as a capstone course that introduces human user interface theory and practice.

Prerequisite: CPSC 317<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 450 - Internship**

Professional work experience performed as an intern at selected agencies supervised both by the agency and by the Computer Science Department.

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 456 - Introduction to Computer Graphics**

This course introduces the basics of interactive computer graphics including software and hardware requirements for computer graphics systems, graphics data structures, algorithms and programming languages, raster and random display devices, and graphics applications. Students will work with dedicated graphics computers in completing laboratory exercises and course projects.

Prerequisite: CPSC 374<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**CPSC 464 - Principles of Concurrent Programming and Operating Systems**

An introduction to operating systems with emphasis on fundamental principles. These include store management, processor management, file systems, and input/output. Laboratory exercises are assigned using a language that supports concurrency. Distributed and "real time" illustrations are used, as well as standard operating system illustrations.

Prerequisites: CPSC 370<sup>D</sup> and CPSC 374<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 466 - Compiler Design and Implementation**

This is an introduction to language translation. Topics include specification of languages and its relation to automata, lexical analysis, finite state machines, context free languages, LL and LR parsing methods, syntax directed translation, error recovery, code generation, and portability.

Prerequisites: CPSC 370<sup>D</sup> and CPSC 374<sup>D</sup> and CPSC 376<sup>D</sup> and CPSC 378<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 468 - Software Engineering and Project Management**

Software Engineering and Project Management deals with Software Development Life-Cycle Methodologies. SDLC methodologies consist of gathering requirements on, implementation, testing, documentation, deployment and maintenance of software. The software development life cycle (SDLC) is a framework defining tasks performed at each step in the software development process. SDLC is a structure followed by a development team within the software organization. It consists of a detailed plan describing how to develop, maintain and replace specific software. The life cycle defines a methodology for improving the quality of software and the overall development process. If the student takes CPSC 468 for the undergraduate program, he/she can take CPSC 668 for additional credits.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1 or Senior 2.

**CPSC 474 - Advanced Architecture & Parallel Computing**

This course will investigate the architecture and software models involved in parallel computing. We will explore both shared-memory and distributed-memory systems, along with the algorithms and languages involved in those systems.

Prerequisites: CPSC 370<sup>D</sup> and CPSC 374<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 476 - Artificial Intelligence**

A survey of artificial intelligence topics including heuristic programming, search techniques, knowledge representation, expert systems, vision and speech in automators, pattern recognition, and robotics.

Prerequisite: CPSC 374<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 478 - Analysis of Algorithms**

An advanced study of algorithms and data structures. Analysis of algorithms, space and time complexity, and the NP classes will be considered. Significant illustrative individual or group programming projects are required. Examples may be drawn from heuristic programming, encipherment, natural language processing, object code generation, combinatorial analysis, graphics, robotics, relational databases, or other algorithmic issues of current importance.

Prerequisite: CPSC 374<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 480 - Topics in Computer Science: Machine Learning**

This course provides an overview of concepts, techniques, algorithms and applications in machine learning, including supervised learning (e.g.: classification and regression), unsupervised learning (e.g.: clustering and dimensionality reduction), and learning theory (e.g.: bias/variance; regularization and feature selection). Moreover, the course will include research projects that will require writing computer code, conduction experiments, and writing papers. If the student takes CPSC 480 for the undergraduate program, he/she can take CPSC 680 for additional credits.

Prerequisite: CPSC 374<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 485 - Big Data Analytics**

This course covers the theoretical and practical fundamentals of Big Data. Students will learn the essentials of big data analytics including Big Data Characteristics, Management, Storage, Processing, and Analysis. The course is designed to involve hands-on experience with big data frameworks such as Hadoop MapReduce and Spark. If the student takes CPSC 485 for the undergraduate program, he/she can take CPSC 685 for additional credits.

Prerequisite: CPSC 405<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 488 - Software Engineering**

The course is the study of software engineering principles and design. The course will emphasize requirement analysis, design, testing, debugging and implementation of a semester long project. Students will work in groups for the project to be implemented. There will be multiple phases for the design and implementation of the project. The project will be implemented using a standard programming environment.

Prerequisite: CPSC 374<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 490 - Independent Study**

Supervised study in a special interest area. Prerequisites: Two computer science courses selected from 370 or above, permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CYBR Courses****CYBR 101 - Cybersecurity in the Era of Evolving Technology**

This course covers the fundamental concepts and design principles behind cybersecurity. This course will provide the students with the awareness, knowledge, opportunity and resources to develop the cybersecurity skills required for full participation as informed, responsible, ethical and productive citizens. Through research-oriented discussions and projects, the course will focus on security design, principles, ethics and models that all students should know and be able to apply independently when using technology, computing systems, digital media and information technology, including the internet.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Transfer Thread Completion Course, United Stated in Global Context

**CYBR 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**CYBR 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CYBR 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**CYBR 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CYBR 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CYBR 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**CYBR 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CYBR 301 - Secure Programming**

This class will present the basic topics in computer security and their relationship to secure programming. A broad array of topics in secure software development will be covered such as the following: Security models, threats, design principles and secure coding practices. The course will cover programming language features and semantics to evaluate and to facilitate implementation of programs that are free from vulnerabilities. Additionally, different types of systems including web-based systems and some internals of OS kernel software testing and exploitation will be explored. Moreover, the software design patterns to built-in security during the architectural phase of the lifecycle will also be covered in detail.

Prerequisite: CPSC 246<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1 or Senior 2.

Enrollment limited to students in a Bachelor of Science degree.

**CYBR 353 - Software Assurance**

This class will present a detailed description of software assurance practices, methods, and tools required throughout the software development life-cycle. The students will apply the development life-cycle processes and methodologies to explore common programming errors and to evaluate the common software testing tools.

Prerequisite: CPSC 246<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1 or Senior 2.

Enrollment limited to students in a Bachelor of Science degree.

**CYBR 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1, Freshman 2 or Sophomore 1.

**CYBR 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CYBR 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CYBR 401 - Software Security Analysis**

This course presents the tools and methods for analyzing software security. This course will focus on software penetration testing and will stress the critical aspects of software security testing in all phases of the software development life cycle with special emphasis on applications that are about to be deployed. An in-depth discussion on various security testing methods and tool vulnerabilities will be taught with hands-on demo of concepts during the class. Students will learn how to perform penetration testing in a practical way using well-established tools. The course will cover a wide range of topics such as web architecture, application infrastructure, reconnaissance, discovery, mapping, and exploitation.

Prerequisite: CYBR 353<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1 or Senior 2.

Enrollment limited to students in a Bachelor of Science degree.

**CYBR 471 - Malware Analysis**

This course covers foundational knowledge of discovering software vulnerabilities. The topics of reverse engineering and malware investigation will be presented in detail through the study of various cases and hand-on analysis of malware samples. It covers fundamental techniques that are used to analyze both source and binary code to equip the students with enough background knowledge for examining current threats and discussing the actions needed to prevent attackers from taking advantage of both known and unknown vulnerabilities.

Prerequisite: CYBR 401<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1 or Senior 2.

Enrollment limited to students in a Bachelor of Science degree.

**CYBR 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CYBR 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CYBR 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Big Data Science, Certificate

Data analytical skills are considered one of the most sought skills in different domains. The big data science certificate will provide students to master these skills and help them learn how to deal with complex data. After completing the certificate, students will have mastered programming skills, fundamentals of statistics, basics and advanced approaches for processing data in tabular format, principles of big data analytics, as well as modern descriptive, predictive, and prescriptive analytical techniques. The certificate helps meet the growing demand for data science professionals.

To access Certificate Requirements, please view the Curriculum Guide tab.

## Related Links

Data Science Certificate Program Page ([https://www.sru.edu/academics/certificates/data-science-certificate-\(online\)/](https://www.sru.edu/academics/certificates/data-science-certificate-(online)/))

Mathematics and Statistics Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/mathematics-and-statistics/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Certificate GPA: 2.0 or higher

### CERTIFICATE REQUIREMENTS

Code	Title	Hours
<b>Required Courses</b>		
CPSC 146	Programming Principles	3
CPSC 210	Productivity Software	3
CPSC 323	Fundamentals of Database Systems	3
CPSC 405	Data Mining & Analysis	3
CPSC 485	Big Data Analytics	3
STAT 152	Elementary Statistics I	3
<b>Total Hours</b>		<b>18</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

CERTIFICATE IN BIG DATA SCIENCE (6BDS)

This program is effective as of Summer 2021

Revised 07.30.2021

UCC: 03.30.2021

## Computing, Bachelor of Science (BS) - Concentration in Computer Science

### Program Learning Outcomes

- **Problem Solving and Critical Thinking:** Solve Problems by creating client/server applications that are efficient, user-friendly, and portable
  - Formulate project requirements and alternative solutions appropriate to the computing problems
  - Integrate design and implementation principles to develop effective applications

- Perform critical analyses of the impacts of decisions based on mathematics
- Implement solutions to computing problems written in various programming languages
- Create efficient, user-friendly applications appropriate to the computing problems
- **Communication and Interpersonal Skills:** Use written, oral and electronic methods for effective communication
  - Document all aspects of a system precisely and clearly
  - Use written, oral, and electronic communication to convey technical information effectively
  - Devise effective user interfaces based on the application
  - Work cooperatively in teams and with others
- **Ethical and Professional Responsibilities:** Discern and articulate the impact of technologies on society
  - Determine the economic and organizational effects of information technology on global society
  - Recognize important legal issues and demonstrate appropriate social responsibilities in information technology
  - Demonstrate an awareness of the codes of professional ethics in the information technology industry
  - Plan for and ensure the security, privacy, and integrity of data
  - Recognize the need for continuing professional development

## Related Links

Computing - Computer Science, BS Flowchart (<https://www.sru.edu/documents/academics/departments/computer-science/course-flowchart-compsci-computer-science-concentration.pdf>)

Computing - Computer Science, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/computing-computer-science/>)

Computer Science Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/computer-science/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42-43
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	54
	Electives	24

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
Select one of the following:		3-4
MATH 125	Precalculus	
MATH 225	Calculus I	
MATH 230	Calculus II	
MATH 231	Calculus III	
STAT 152	Elementary Statistics I	
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15-16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Science Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42-43</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>



## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- 27 major credits must be taken at SRU or PASSHE
- 27 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Core Courses</b>		
CPSC 130	Introduction to Computing and Programming <sup>1</sup>	3
CPSC 146	Programming Principles <sup>1</sup>	3
CPSC 207	Shell Commands and Scripting <sup>1</sup>	3
CPSC 300	Challenges of Computer Technology <sup>1</sup>	3
CPSC 311	Discrete Computational Structures <sup>1</sup>	3
CPSC 323	Fundamentals of Database Systems <sup>1</sup>	3
CPSC 327	Administration and Security <sup>1</sup>	3
CPSC 423	Computer Networks <sup>1</sup>	3
STAT 152	Elementary Statistics I <sup>1</sup>	3
Subtotal		27
<b>Computer Science Core Courses</b>		
CPSC 246	Advanced Programming Principles <sup>1</sup>	3
CPSC 370	Computer Organization and Architecture <sup>1</sup>	3
CPSC 374	Algorithms and Data Structures <sup>1</sup>	3
CPSC 376	Programming Language and Theory <sup>1</sup>	3
CPSC 474	Advanced Architecture & Parallel Computing	3
CPSC 476	Artificial Intelligence <sup>1</sup>	3
CPSC 488	Software Engineering <sup>1</sup>	3
Subtotal		21
<b>Computer Science Electives</b>		
Choose one from the following:		3
CPSC 217	Advanced Web Programming <sup>1</sup>	
CPSC 236	Selected Computer Languages <sup>1</sup>	
CPSC 237	Mobile App Development for Smart Devices <sup>1</sup>	
CPSC 315	Internet of Things (IoT) <sup>1</sup>	
Choose one from the following:		3

CPSC 405	Data Mining & Analysis <sup>1</sup>	
CPSC 406	Data Visualization <sup>1</sup>	
CPSC 450	Internship <sup>1</sup>	
CPSC 456	Introduction to Computer Graphics <sup>1</sup>	
CPSC 478	Analysis of Algorithms	
CPSC 480	Topics in Computer Science: Machine Learning	
CPSC 485	Big Data Analytics <sup>1</sup>	
Subtotal		6
<b>Total Hours</b>		<b>54</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes (Learning Community, Cap-Stone Course, Semester Projects)
2. Student-faculty research
3. Service Learning Courses
4. Internships
5. Volunteering (Summer Day Camps, Semester Workshops for K-12 students, Robot demos for visitors/local school districts)
6. Industry Awareness Night

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

COMPUTING - BS (6420)

Concentration in Computer Science (642C)

This program is effective as of Fall 2022

Revised 06.10.2022

UCC 03.01.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CPSC 130	Introduction to Computing and Programming	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3

MATH 120 or SCI 101	Intermediate Algebra or Science of Life	3
ESAP 101	FIRST Seminar *	1
ENGL 102	Critical Writing	3
Creative & Aesthetic Inquiry (p. 29)		3

**Hours** **16**

#### Spring

CPSC 146	Programming Principles	3
Select one of the following:		3-4
MATH 125	Precalculus	
MATH 225	Calculus I	
MATH 230	Calculus II	
MATH 231	Calculus III	
STAT 152	Elementary Statistics I	
ENGL 104	Critical Reading	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Social Science Inquiry (p. 29)		3

**Hours** **15-16**

#### Second Year

##### Fall

CPSC 207	Shell Commands and Scripting	3
CPSC 246	Advanced Programming Principles	3
STAT 152	Elementary Statistics I	3
SCI 101	Science of Life (or CS Elective)	3
Computer Science Elective or Free Elective <sup>3</sup>		3
Declare a Thematic Thread <sup>2</sup>		

**Hours** **15**

##### Spring

CPSC 323	Fundamentals of Database Systems	3
CPSC 370	Computer Organization and Architecture (S)	3
Humanities Inquiry (p. 29)		3
SCI 102	Understanding the Physical World	3
Computer Science Elective or Free Elective <sup>3</sup>		3

**Hours** **15**

#### Third Year

##### Fall

CPSC 311	Discrete Computational Structures	3
CPSC 300	Challenges of Computer Technology	3
CPSC 376	Programming Language and Theory (F)	3
Thematic Thread Requirement (p. 29)		3
Computer Science Elective or Free Elective <sup>3</sup>		3

**Hours** **15**

##### Spring

CPSC 327	Administration and Security (S)	3
CPSC 374	Algorithms and Data Structures (S)	3
Thematic Thread Requirement (p. 29)		3
Computer Science Elective or Free Elective <sup>3</sup>		3

Computer Science Elective or Free Elective <sup>3</sup>	3
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**Hours** **15**

#### Fourth Year

##### Fall

CPSC 423	Computer Networks (F)	3
CPSC 474	Advanced Architecture & Parallel Computing (F)	3
Thematic Thread Requirement (p. 29)		3
Computer Science Elective or Free Elective <sup>3</sup>		3
Computer Science Elective or Free Elective <sup>3</sup>		3

**Hours** **15**

##### Spring

CPSC 488	Software Engineering (S)	3
Thematic Thread Requirement (p. 29)		3
CPSC 476	Artificial Intelligence	3
Computer Science Elective or Free Elective <sup>3</sup>		4

**Hours** **13**

**Total Hours\*\*** **119-120**

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>3</sup> Computer Science Electives - 9 Credits required:  
Select one of the following: CPSC 217, CPSC 236, CPSC 237, CPSC 315  
Select one of the following: CPSC 405, CPSC 476  
Select one of the following: CPSC 406, CPSC 450, CPSC 456, CPSC 478, CPSC 480, CPSC 485

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6420

Concentration: 642C

Revised date: 06.10.2022

## Computing, Bachelor of Science (BS) - Concentration in Computer Science with Concentration in Bioinformatics Program Learning Outcomes

- **Problem Solving and Critical Thinking:** Solve Problems by creating client/server applications that are efficient, user-friendly, and portable
  - Formulate project requirements and alternative solutions appropriate to the computing problems
  - Integrate design and implementation principles to develop effective applications
  - Perform critical analyses of the impacts of decisions based on mathematics

- Implement solutions to computing problems written in various programming languages
- Create efficient, user-friendly applications appropriate to the computing problems
- **Communication and Interpersonal Skills:** Use written, oral and electronic methods for effective communication
  - Document all aspects of a system precisely and clearly
  - Use written, oral, and electronic communication to convey technical information effectively
  - Devise effective user interfaces based on the application
  - Work cooperatively in teams and with others
- **Ethical and Professional Responsibilities:** Discern and articulate the impact of technologies on society
  - Determine the economic and organizational effects of information technology on global society
  - Recognize important legal issues and demonstrate appropriate social responsibilities in information technology
  - Demonstrate an awareness of the codes of professional ethics in the information technology industry
  - Plan for and ensure the security, privacy, and integrity of data
  - Recognize the need for continuing professional development

Related Links

Computing - Computer Science Bioinformatics, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/computing-computer-science/>)

Computer Science Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/computer-science/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

Curriculum Guide

GPA Requirement

Major GPA: 2.0 or higher  
Overall GPA: 2.0 or higher

Summary\*

Code	Title	Hours
Rock Studies 2 Requirements		44-45
Other Basic Requirements		0-3
Computer Competency		0-3
Major/Concentration Requirements		54
Bioinformatics Concentration Requirements		18
Electives		3-4

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies 2 Requirements

Code	Title	Hours
The Rock		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3

Select one of the following:		3-4
MATH 125	Precalculus	
MATH 225	Calculus I	
MATH 230	Calculus II	
MATH 231	Calculus III	
STAT 152	Elementary Statistics I	
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15-16
Integrated Inquiry		
Creative and Aesthetic Inquiry		
Select 3 Credits (p. 29)		3
Humanities Inquiry		
Select 3 Credits (p. 29)		3
Social Science Inquiry		
Select 3 Credits (p. 29)		3
Physical and Natural Science Inquiry		
Select one of the following:		4
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	
BIOL 101 & BIOL 100	General Biology and Introductory Biology Laboratory	
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
Subtotal		17
Thematic Thread		
Select 12 Credits (p. 29) <sup>2</sup>		12
Total Hours		44-45

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject
- <sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
Total Hours		0-3

Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		

Select one of the following at SRU or another post-secondary institution:

CPSC 100	Introduction to Computing for Liberal Arts
CPSC 110	Computer Concepts
CPSC 130	Introduction to Computing and Programming
PE 202	Technology for Wellness

**Total Hours** **0-3**

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- 27 major credits must be taken at SRU or PASSHE
- 27 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Core Courses</b>		
CPSC 130	Introduction to Computing and Programming <sup>1</sup>	3
CPSC 146	Programming Principles <sup>1</sup>	3
CPSC 207	Shell Commands and Scripting <sup>1</sup>	3
CPSC 300	Challenges of Computer Technology <sup>1</sup>	3
CPSC 311	Discrete Computational Structures <sup>1</sup>	3
CPSC 323	Fundamentals of Database Systems <sup>1</sup>	3
CPSC 327	Administration and Security <sup>1</sup>	3
CPSC 423	Computer Networks <sup>1</sup>	3
STAT 152	Elementary Statistics I <sup>1</sup>	3
Subtotal		27
<b>Computer Science Core Courses</b>		
CPSC 246	Advanced Programming Principles <sup>1</sup>	3
CPSC 370	Computer Organization and Architecture <sup>1</sup>	3
CPSC 374	Algorithms and Data Structures <sup>1</sup>	3
CPSC 376	Programming Language and Theory <sup>1</sup>	3
CPSC 474	Advanced Architecture & Parallel Computing	3
CPSC 476	Artificial Intelligence <sup>1</sup>	3
CPSC 488	Software Engineering <sup>1</sup>	3
Subtotal		21
<b>Computer Science Electives</b>		
Select one of the following:		3
CPSC 217	Advanced Web Programming <sup>1</sup>	
CPSC 236	Selected Computer Languages	
CPSC 237	Mobile App Development for Smart Devices <sup>1</sup>	
CPSC 315	Internet of Things (IoT) <sup>1</sup>	
Select one of the following:		3
CPSC 405	Data Mining & Analysis <sup>1</sup>	
CPSC 406	Data Visualization <sup>1</sup>	
CPSC 450	Internship <sup>1</sup>	
CPSC 456	Introduction to Computer Graphics <sup>1</sup>	

CPSC 478	Analysis of Algorithms
CPSC 480	Topics in Computer Science: Machine Learning
CPSC 485	Big Data Analytics <sup>1</sup>
Subtotal	6
<b>Total Hours</b>	<b>54</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Bioinformatics Concentration

Code	Title	Hours
CHEM 201	Organic Chemistry I	3
BIOL 325	Biometry with Lab	3
BIOL 335	Cell Biology/Lab	3
BIOL 370	Molecular Biology with Lab	3
CPSC 342	Introduction to Bioinformatics	3
CPSC 415	Advanced Bioinformatics	3
<b>Total Hours</b>		<b>18</b>

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes (Learning Community, Cap-Stone Course, Semester Projects)
2. Student-faculty research
3. Service Learning Courses
4. Internships
5. Volunteering (Summer Day Camps, Semester Workshops for K-12 students, Robot demos for visitors/local school districts)
6. Industry Awareness Night

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

COMPUTING - BS (6420)

Concentration in Computer Science (642C)

w/optional Concentration in Bioinformatics (644C)

This program is effective as of Summer 2022

Revised 01.02.2024

UCC 3.1.2022

# Computing, Bachelor of Science (BS) - Concentration in Computing Analytics

## Program Learning Outcomes

- **Problem Solving and Critical Thinking:** Solve Problems by creating client/server applications that are efficient, user-friendly, and portable
  - Formulate project requirements and alternative solutions appropriate to the computing problems
  - Integrate design and implementation principles to develop effective applications
  - Perform critical analyses of the impacts of decisions based on mathematics
  - Implement solutions to computing problems written in various programming languages
  - Create efficient, user-friendly applications appropriate to the computing problems
- **Communication and Interpersonal Skills:** Use written, oral and electronic methods for effective communication
  - Document all aspects of a system precisely and clearly
  - Use written, oral, and electronic communication to convey technical information effectively
  - Devise effective user interfaces based on the application
  - Work cooperatively in teams and with others
- **Ethical and Professional Responsibilities:** Discern and articulate the impact of technologies on society
  - Determine the economic and organizational effects of information technology on global society
  - Recognize important legal issues and demonstrate appropriate social responsibilities in information technology
  - Demonstrate an awareness of the codes of professional ethics in the information technology industry
  - Plan for and ensure the security, privacy, and integrity of data
  - Recognize the need for continuing professional development

## Related Links

Computing - Computing Analytics, BS Flowchart (<https://www.sru.edu/documents/academics/departments/computer-science/course-flowchart-compsci-concentratin-computing-analytics.pdf>)

Computing - Computing Analytics, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/computing-computing-analytics/>)

Computer Science Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/computer-science/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

## Summary\*

Code	Title	Hours
Rock Studies 2 Requirements		42-43
Other Basic Requirements		0-3
Computer Competency		0-3
Major/Concentration Requirements		54
Electives		24

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
Select one of the following:		3-4
MATH 125	Precalculus	
MATH 225	Calculus I	
MATH 230	Calculus II	
MATH 231	Calculus III	
STAT 152	Elementary Statistics I	
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15-16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42-43</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.



## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- 27 major credits must be taken at SRU or PASSHE
- 27 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Core Courses</b>		
CPSC 130	Introduction to Computing and Programming <sup>1</sup>	3
CPSC 146	Programming Principles <sup>1</sup>	3
CPSC 207	Shell Commands and Scripting <sup>1</sup>	3
CPSC 300	Challenges of Computer Technology <sup>1</sup>	3
CPSC 311	Discrete Computational Structures <sup>1</sup>	3
CPSC 323	Fundamentals of Database Systems <sup>1</sup>	3
CPSC 327	Administration and Security <sup>1</sup>	3
CPSC 423	Computer Networks <sup>1</sup>	3
STAT 152	Elementary Statistics I <sup>1</sup>	3
Subtotal		27
<b>Computing Analytics Core Courses</b>		
CPSC 246	Advanced Programming Principles <sup>1</sup>	3
CPSC 370	Computer Organization and Architecture	3
CPSC 374	Algorithms and Data Structures <sup>1</sup>	3
CPSC 405	Data Mining & Analysis <sup>1</sup>	3
CPSC 474	Advanced Architecture & Parallel Computing	3

CPSC 480	Topics in Computer Science: Machine Learning <sup>1</sup>	3
CPSC 485	Big Data Analytics <sup>1</sup>	3
Subtotal		21

### Computer Science Electives

Choose two from the following:		6
MATH 225	Calculus I	
CPSC 406	Data Visualization <sup>1</sup>	
CPSC 450	Internship <sup>1</sup>	
CPSC 456	Introduction to Computer Graphics <sup>1</sup>	
CPSC 476	Artificial Intelligence <sup>1</sup>	
CPSC 478	Analysis of Algorithms <sup>1</sup>	
Subtotal		6
<b>Total Hours</b>		<b>54</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes (Learning Community, Cap-Stone Course, Semester Projects)
2. Student-faculty research
3. Service Learning Courses
4. Internships
5. Volunteering (Summer Day Camps, Semester Workshops for K-12 students, Robot demos for visitors/local school districts)
6. Industry Awareness Night

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

COMPUTING - BS (6420)

Concentration in Computing Analytics (COAN)

This program is effective as of Summer 2022

Revised 06.10.2022

UCC 03.01.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CPSC 130	Introduction to Computing and Programming	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
MATH 120 or SCI 101	Intermediate Algebra or Science of Life	3
ENGL 102	Critical Writing	3
ESAP 101	FIRST Seminar *	1
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
CPSC 146	Programming Principles	3
Select one of the following:		3-4
MATH 125	Precalculus	
MATH 225	Calculus I	
MATH 230	Calculus II	
MATH 231	Calculus III	
STAT 152	Elementary Statistics I	
ENGL 104	Critical Reading	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Social Science Inquiry (p. 29)		3
<b>Hours</b>		<b>15-16</b>
<b>Second Year</b>		
<b>Fall</b>		
CPSC 207	Shell Commands and Scripting	3
CPSC 246	Advanced Programming Principles	3
STAT 152	Elementary Statistics I	3
SCI 101	Science of Life (or CA Elective)	3
Computer Analytics Electives or Free Electives (p. 422)		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
CPSC 323	Fundamentals of Database Systems	3
CPSC 370	Computer Organization and Architecture	3
Humanities Inquiry (p. 29)		3
SCI 102	Understanding the Physical World	3
Computer Analytics Electives or Free Electives (p. 422)		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
CPSC 311	Discrete Computational Structures	3
CPSC 300	Challenges of Computer Technology	3
CPSC 405	Data Mining & Analysis	3
Thematic Thread Requirement (p. 29)		3
Computer Analytics Electives or Free Electives (p. 422)		3
<b>Hours</b>		<b>15</b>

<b>Spring</b>		
CPSC 327	Administration and Security	3
CPSC 374	Algorithms and Data Structures	3
Thematic Thread Requirement (p. 29)		3
Computer Analytics Electives or Free Electives (p. 422)		3
Computer Analytics Electives or Free Electives (p. 422)		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
CPSC 423	Computer Networks	3
CPSC 474	Advanced Architecture & Parallel Computing	3
CPSC 480	Topics in Computer Science: Machine Learning	3
Thematic Thread Requirement (p. 29)		3
Computer Analytics Elective or Free Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
CPSC 485	Big Data Analytics	3
Thematic Thread Requirement (p. 29)		3
Computer Analytics Electives or Free Electives (p. 422)		4
Computer Analytics Electives or Free Electives (p. 422)		3
<b>Hours</b>		<b>13</b>
<b>Total Hours**</b>		<b>119-120</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

## Computer Analytics Elective Courses

Code	Title	Hours
Select six credits of the following:		
CPSC 406	Data Visualization	
CPSC 450	Internship <sup>1</sup>	
CPSC 456	Introduction to Computer Graphics	
CPSC 476	Artificial Intelligence	
CPSC 478	Analysis of Algorithms	
MATH 225	Calculus I	

<sup>1</sup> Jr. or Sr. Computing major with 3.0 GPA. Application required.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6420

Concentration Code: COAN

Revised date: 06.10.2022

# Computing, Bachelor of Science (BS) - Concentration in Information Technology

## Program Learning Outcomes

- **Problem Solving and Critical Thinking:** Solve Problems by creating client/server applications that are efficient, user-friendly, and portable
  - Formulate project requirements and alternative solutions appropriate to the computing problems
  - Integrate design and implementation principles to develop effective applications
  - Perform critical analyses of the impacts of decisions based on mathematics
  - Implement solutions to computing problems written in various programming languages
  - Create efficient, user-friendly applications appropriate to the computing problems
- **Communication and Interpersonal Skills:** Use written, oral and electronic methods for effective communication
  - Document all aspects of a system precisely and clearly
  - Use written, oral, and electronic communication to convey technical information effectively
  - Devise effective user interfaces based on the application
  - Work cooperatively in teams and with others
- **Ethical and Professional Responsibilities:** Discern and articulate the impact of technologies on society
  - Determine the economic and organizational effects of information technology on global society
  - Recognize important legal issues and demonstrate appropriate social responsibilities in information technology
  - Demonstrate an awareness of the codes of professional ethics in the information technology industry
  - Plan for and ensure the security, privacy, and integrity of data
  - Recognize the need for continuing professional development

## Related Links

Computing - Information Technology, BS Flowchart (<https://www.sru.edu/documents/academics/departments/computer-science/course-flowchart-compsci-infotech-concentration.pdf>)

Computing - Information Technology, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/computing-information-technology/>)

Computer Science Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/computer-science/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

## Summary\*

Code	Title	Hours
Rock Studies 2 Requirements		42-43
Other Basic Requirements		0-3
Computer Competency		0-3
Major/Concentration Requirements		54
Electives		24

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
Select one of the following:		3-4
MATH 125	Precalculus	
MATH 225	Calculus I	
MATH 230	Calculus II	
MATH 231	Calculus III	
STAT 152	Elementary Statistics I	
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15-16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42-43</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- 27 major credits must be taken at SRU or PASSHE
- 27 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Core Courses</b>		
CPSC 130	Introduction to Computing and Programming <sup>1</sup>	3
CPSC 146	Programming Principles <sup>1</sup>	3
CPSC 207	Shell Commands and Scripting <sup>1</sup>	3
CPSC 300	Challenges of Computer Technology <sup>1</sup>	3
CPSC 311	Discrete Computational Structures <sup>1</sup>	3
CPSC 323	Fundamentals of Database Systems <sup>1</sup>	3
CPSC 327	Administration and Security <sup>1</sup>	3
CPSC 423	Computer Networks <sup>1</sup>	3
STAT 152	Elementary Statistics I <sup>1</sup>	3
Subtotal		27
<b>Information Technology Core Courses</b>		
CPSC 217	Advanced Web Programming <sup>1</sup>	3
CPSC 237	Mobile App Development for Smart Devices <sup>1</sup>	3
CPSC 315	Internet of Things (IoT) <sup>1</sup>	3
CPSC 317	Server-Side Scripting <sup>1</sup>	3
CPSC 427	IT Capstone Project <sup>1</sup>	3
Subtotal		15

## Information Technology Electives

Select two courses in sequence from one of the following areas: 6

### Cybersecurity

CYBR 101	Cybersecurity in the Era of Evolving Technology <sup>1</sup>
CPSC 301	Practical Computer Security <sup>1</sup>

### Management

MGMT 351	Organizational Behavior <sup>1</sup>
Any MGMT course 300 level or above <sup>1</sup>	

## Information Technology Electives

Select two additional courses from the following (one must be 300 level or above): 6

CPSC 125	3D Modeling for Computing <sup>1</sup>
CPSC 236	Selected Computer Languages <sup>1</sup>
CPSC 246	Advanced Programming Principles <sup>1</sup>
CPSC 301	Practical Computer Security <sup>1</sup>
CPSC 333	Introduction to Computer Forensics <sup>1</sup>
CPSC 405	Data Mining & Analysis <sup>1</sup>
CPSC 406	Data Visualization <sup>1</sup>
CPSC 417	Advanced Web Technologies <sup>1</sup>
CPSC 450	Internship <sup>1</sup>
CSS 354	Risk Assessment and Fraud Prevention <sup>1</sup>
Subtotal	12
<b>Total Hours</b>	<b>54</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes (Learning Community, Cap-Stone Course, Semester Projects)
2. Student-faculty research
3. Service Learning Courses
4. Internships
5. Volunteering (Summer Day Camps, Semester Workshops for K-12 students, Robot demos for visitors/local school districts)
6. Industry Awareness Night

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

COMPUTING - BS (6420)

Concentration in Information Technology (643C)

This program is effective as of Fall 2022

Revised 06.10.2022

UCC 03.01.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CPSC 130	Introduction to Computing and Programming	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
MATH 120	Intermediate Algebra	3
or SCI 101	or Science of Life	
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
CPSC 146	Programming Principles	3
Select one of the following:		3-4
MATH 125	Precalculus	
MATH 225	Calculus I	
MATH 230	Calculus II	
MATH 231	Calculus III	
STAT 152	Elementary Statistics I	
ENGL 104	Critical Reading	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Social Science Inquiry (p. 29)		3
<b>Hours</b>		<b>15-16</b>
<b>Second Year</b>		
<b>Fall</b>		
CPSC 207	Shell Commands and Scripting	3
CPSC 217	Advanced Web Programming	3
STAT 152	Elementary Statistics I	3
SCI 101	Science of Life (or IT Elective)	3
IT Elective or Free Elective (p. 425)		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
CPSC 323	Fundamentals of Database Systems	3
IT Elective or Free Elective (p. 425)		3
Humanities Inquiry (p. 29)		3
CPSC 300	Challenges of Computer Technology	3
SCI 102	Understanding the Physical World	3
<b>Hours</b>		<b>15</b>

### Third Year

#### Fall

CPSC 237	Mobile App Development for Smart Devices	3
CPSC 311	Discrete Computational Structures	3
CPSC 317	Server-Side Scripting	3
Thematic Thread Requirement (p. 29)		3
Select one of the following:		3
CYBR 101	Cybersecurity in the Era of Evolving Technology	
MGMT3xx/4xx	Management Elective	
<b>Hours</b>		<b>15</b>

#### Spring

CPSC 315	Internet of Things (IoT)	3
CPSC 327	Administration and Security	3
Select one of the following:		3
CPSC 301	Practical Computer Security	
MGMT 351	Organizational Behavior	
Thematic Thread Requirement (p. 29)		3
IT Elective or Free Elective (p. 425)		3
<b>Hours</b>		<b>15</b>

### Fourth Year

#### Fall

CPSC 423	Computer Networks	3
IT Elective or Free Elective (p. 425)		3
IT Elective or Free Elective (p. 425)		3
IT Elective or Free Elective (p. 425)		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>

#### Spring

CPSC 427	IT Capstone Project	3
Thematic Thread Requirement (p. 29)		3
IT Elective or Free Elective (p. 425)		3
IT Elective or Free Elective (p. 425)		4
<b>Hours</b>		<b>13</b>
<b>Total Hours**</b>		<b>119-120</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* Jr. or Sr. Computing major with 3.0 GPA. Application required

## IT Elective Courses

Code	Title	Hours
CPSC 125	3D Modeling for Computing	3
CPSC 236	Selected Computer Languages	3
CPSC 246	Advanced Programming Principles	3
CPSC 301	Practical Computer Security	3
CPSC 333	Introduction to Computer Forensics	3
CPSC 405	Data Mining & Analysis	3
CPSC 406	Data Visualization	3
CPSC 417	Advanced Web Technologies	3



CPSC 450	Internship	3
CSS 354	Risk Assessment and Fraud Prevention	3

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

Major Code: 6420  
Concentration Code: 643C  
Revised Date: 04.29.2022

## Computing, Minor

The Computing Minor is designed to offer students the opportunity to learn the fundamentals of computers as well as the critical issues related to the computerization of society, learn the basics of programming languages for developing different types of applications, master shell programming in prevalent operating systems, as well as the ability to manage data repositories.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Computing, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/computing-computer-science/>)

Computer Science Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/computer-science/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.
- The Computing minor must submit this self-maintained curriculum guide to the Computer Science Department for verification.

Code	Title	Hours
<b>Core Requirements</b>		
CPSC 130	Introduction to Computing and Programming	3
CPSC 146	Programming Principles	3
CPSC 207	Shell Commands and Scripting	3
CPSC 300	Challenges of Computer Technology	3
or MIS 300	Challenges of Computer Technology	
CPSC 323	Fundamentals of Database Systems	3
or MIS 323	Data Base Systems	

### Computer Science Electives

Select two of the following courses:	6
CPSC 217	Advanced Web Programming
CPSC 237	Mobile App Development for Smart Devices
CPSC 246	Advanced Programming Principles
CPSC 315	Internet of Things (IoT)

### Additional Elective

Select three credits from the electives below	3
Additional Electives (p. 426)	

<b>Total Hours</b>	<b>24</b>
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## Additional Electives

Code	Title	Hours
CPSC 317	Server-Side Scripting	3
CPSC 327	Administration and Security	3
CPSC 333	Introduction to Computer Forensics	3
or MIS 333	Introduction to Computer Forensics	
CPSC 337	Introduction to Web Graphics	3
CPSC 370	Computer Organization and Architecture	3
CPSC 374	Algorithms and Data Structures	3
CPSC 376	Programming Language and Theory	3
CPSC 405	Data Mining & Analysis	3
or CPSC 605	Data Mining and Data Analysis	
CPSC 406	Data Visualization	3
or CPSC 606	Data Visualization	
CPSC 417	Advanced Web Technologies	3
CPSC 423	Computer Networks	3
CPSC 427	IT Capstone Project	3
CPSC 450	Internship	3
CPSC 456	Introduction to Computer Graphics	3
CPSC 464	Principles of Concurrent Programming and Operating Systems	3
CPSC 476	Artificial Intelligence	3
CPSC 480	Topics in Computer Science: Machine Learning	3
CPSC 488	Software Engineering	3
ART 214	Intermediate Studio Digital Media	3
COMM 201	Digital Imaging	3
COMM 248	Interactive Multimedia 1	3
COMM 254	Video Production	3
COMM 258	Interactive Multimedia 2	3
COMM 350	Editing for Video	3
COMM 359	Interactive Multimedia 3	3
ECON 219	Business Analytics I	3
or MGMT 219	Business Analytics I	
MGMT 351	Organizational Behavior	3
MIS 265	Management Information Systems	3
MIS 413	Systems Analysis	3
MRKT 230	Principles of Marketing	3
STAT 152	Elementary Statistics I	3

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Minor in Computing (14D)

This program is effective as of Fall 2019.

Revised 07.27.2021

UCC 3.26.2019

## Cybersecurity, Bachelor of Science (BS) - Concentration in Secure Software Development

### Program Learning Outcomes

- **Problem Solving and Critical Thinking**
  - Formulate project requirements and alternative solutions appropriate to the problem in a secure manner
  - Integrate design and implementation principles to develop effective software without introduction of vulnerabilities
  - Perform analyze software security and the efficiency of algorithms
  - Implement solutions to computing problems written in various programming languages
  - Use appropriate tools and techniques for identifying malware and other vulnerabilities
- **Communication and Interpersonal Skills**
  - Document all aspects of secure software precisely and clearly
  - Use written, oral, and electronic communication to convey technical information effectively
  - Accurately communicate security analyses, policies, and methodologies
  - Work cooperatively in teams and with others
- **Ethical and Professional Responsibilities**
  - Determine the effects of security policy models in a global society
  - Recognize the important legal and policy issues in the development of secure systems
  - Demonstrate an awareness of the codes of professional ethics in the information technology industry
  - Plan for and ensure the security, privacy, and integrity of data
  - Recognize the need for continuing professional development

## Related Links

Cybersecurity - Secure Software Development, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/cybersecurity/>)

Computer Science Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/computer-science/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	43
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	60
	Electives	17

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
	Select one of the following:	4
MATH 125	Precalculus	
MATH 225	Calculus I	
MATH 230	Calculus II	
MATH 231	Calculus III	
	Select one of the following:	3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
	Subtotal	16

### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
	Select 3 Credits (p. 29)	3
<i>Humanities Inquiry</i>		
	Select 3 Credits (p. 29)	3
<i>Social Science Inquiry</i>		
	Select 3 Credits (p. 29)	3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
	Subtotal	15
<b>Thematic Thread</b>		
	Select 12 Credits (p. 29) <sup>2</sup>	12
	<b>Total Hours</b>	<b>43</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Core Courses</b>		
CPSC 130	Introduction to Computing and Programming <sup>1</sup>	3
CPSC 146	Programming Principles <sup>1</sup>	3
CPSC 207	Shell Commands and Scripting <sup>1</sup>	3
CPSC 300	Challenges of Computer Technology <sup>1</sup>	3
CPSC 301	Practical Computer Security <sup>1</sup>	3
CPSC 311	Discrete Computational Structures <sup>1</sup>	3
CPSC 323	Fundamentals of Database Systems <sup>1</sup>	3
CPSC 327	Administration and Security <sup>1</sup>	3
CPSC 423	Computer Networks <sup>1</sup>	3
CYBR 101	Cybersecurity in the Era of Evolving Technology <sup>1</sup>	3
<b>Subtotal</b>		<b>30</b>

## Secure Software Development Required Courses

CPSC 246	Advanced Programming Principles <sup>1</sup>	3
CPSC 374	Algorithms and Data Structures <sup>1</sup>	3
CPSC 376	Programming Language and Theory <sup>1</sup>	3
CPSC 488	Software Engineering <sup>1</sup>	3
CYBR 301	Secure Programming	3
CYBR 353	Software Assurance <sup>1</sup>	3
CYBR 401	Software Security Analysis <sup>1</sup>	3
CYBR 471	Malware Analysis <sup>1</sup>	3
<b>Subtotal</b>		<b>24</b>

## Secure Software Development Electives

Select two of the following:		6
CPSC 333	Introduction to Computer Forensics <sup>1</sup>	
CPSC 370	Computer Organization and Architecture <sup>1</sup>	
CPSC 450	Internship <sup>1</sup>	
CPSC 474	Advanced Architecture & Parallel Computing <sup>1</sup>	
CPSC 478	Analysis of Algorithms <sup>1</sup>	
<b>Subtotal</b>		<b>6</b>
<b>Total Hours</b>		<b>60</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes (Learning Community, Cap-Stone Course, Semester Projects)
2. Student-faculty research
3. Service Learning Courses
4. Internships
5. Volunteering (Summer Day Camps, Semester Workshops for K-12 students, Robot demos for visitors/local school districts)
6. Industry Awareness Night

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

CYBERSECURITY (6421)

Concentration in Secure Software Development (SSDE)

This program is effective as of Summer 2022

Revised 06.10.2022

UCC 03.01.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CPSC 130	Introduction to Computing and Programming	3
CYBR 101	Cybersecurity in the Era of Evolving Technology	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
MATH 120 or SCI 101	Intermediate Algebra or Science of Life	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
CPSC 146	Programming Principles	3
CPSC 301	Practical Computer Security	3
ENGL 104	Critical Reading	3
Select one of the following:		4
MATH 125	Precalculus	
MATH 225	Calculus I	
MATH 230	Calculus II	
MATH 231	Calculus III	
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
CPSC 207	Shell Commands and Scripting	3
CPSC 246	Advanced Programming Principles	3
SCI 101	Science of Life (or CE Elective)	3
Creative & Aesthetic Inquiry (p. 29)		3
Social Science Inquiry (p. 29)		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
CPSC 323	Fundamentals of Database Systems	3
CYBR 301	Secure Programming	3
CPSC 300	Challenges of Computer Technology	3
Humanities Inquiry (p. 29)		3
SCI 102	Understanding the Physical World (or Cybersecurity Elective)	3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
CPSC 311	Discrete Computational Structures	3
CPSC 376	Programming Language and Theory	3
CYBR 353	Software Assurance	3
Thematic Thread Requirement (p. 29)		3

Cyber Elective or Free Elective (p. 429)		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
CPSC 327	Administration and Security	3
CPSC 374	Algorithms and Data Structures	3
CYBR 401	Software Security Analysis	3
Thematic Thread Requirement (p. 29)		3
Cyber Elective or Free Elective (p. 429)		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
CPSC 423	Computer Networks	3
CYBR 471	Malware Analysis	3
Thematic Thread Requirement (p. 29)		3
Cyber Elective or Free Elective (p. 429)		3
Cyber Elective or Free Elective (p. 429)		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
CPSC 488	Software Engineering	3
Thematic Thread Requirement (p. 29)		3
Cyber Elective or Free Elective (p. 429)		3
Cyber Elective or Free Elective (p. 429)		4
<b>Hours</b>		<b>13</b>
<b>Total Hours**</b>		<b>120</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

### Cyber Elective - CE Courses

Code	Title	Hours
Select six credits		
CPSC 333	Introduction to Computer Forensics	3
CPSC 370	Computer Organization and Architecture	3
CPSC 474	Advanced Architecture & Parallel Computing	3
CPSC 450	Internship <sup>1</sup>	1-12
CPSC 478	Analysis of Algorithms	3

<sup>1</sup> Jr. or Sr. Computing major with 3.0 GPA. Application required

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6421

Concentration: SSDE

Revised date: 06.10.2022

# Cybersecurity, Bachelor of Science (BS) - Concentration in Security Governance

## Program Learning Outcomes

- Problem Solving and Critical Thinking**
  - Formulate project requirements and alternative solutions appropriate to the problem in a secure manner
  - Integrate design and implementation principles to develop effective software without introduction of vulnerabilities
  - Perform analyze software security and the efficiency of algorithms
  - Implement solutions to computing problems written in various programming languages
  - Use appropriate tools and techniques for identifying malware and other vulnerabilities
- Communication and Interpersonal Skills**
  - Document all aspects of secure software precisely and clearly
  - Use written, oral, and electronic communication to convey technical information effectively
  - Accurately communicate security analyses, policies, and methodologies
  - Work cooperatively in teams and with others
- Ethical and Professional Responsibilities**
  - Determine the effects of security policy models in a global society
  - Recognize the important legal and policy issues in the development of secure systems
  - Demonstrate an awareness of the codes of professional ethics in the information technology industry
  - Plan for and ensure the security, privacy, and integrity of data
  - Recognize the need for continuing professional development

## Related Links

- Cybersecurity - Security Governance, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/cybersecurity/>)
- Computer Science Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/computer-science/>)
- Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher  
Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	43
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	60
	Electives	17

\* All undergraduate degree programs require a minimum of 120 credits.  
Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
Select one of the following:		4
MATH 125	Precalculus	
MATH 225	Calculus I	
MATH 230	Calculus II	
MATH 231	Calculus III	
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>43</b>

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject
- <sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		



ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		
0-3		
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Courses</b>		
CPSC 130	Introduction to Computing and Programming <sup>1</sup>	3
CPSC 146	Programming Principles <sup>1</sup>	3
CPSC 207	Shell Commands and Scripting <sup>1</sup>	3
CPSC 300	Challenges of Computer Technology <sup>1</sup>	3
CPSC 301	Practical Computer Security	3
CPSC 311	Discrete Computational Structures <sup>1</sup>	3
CPSC 323	Fundamentals of Database Systems <sup>1</sup>	3
CPSC 327	Administration and Security <sup>1</sup>	3
CPSC 423	Computer Networks <sup>1</sup>	3
CYBR 101	Cybersecurity in the Era of Evolving Technology <sup>1</sup>	3
Subtotal		30
<b>Security Governance Required Courses</b>		
CPSC 102	Collaborative Information Technology and Society <sup>1</sup>	3
CPSC 237	Mobile App Development for Smart Devices <sup>1</sup>	3
CPSC 217 or CPSC 246	Advanced Web Programming <sup>1</sup> Advanced Programming Principles	3
CPSC 333	Introduction to Computer Forensics <sup>1</sup>	3
CSS 120	Introduction to Private Security	3
CSS 240	Security Management	3
MIS 401	Information Systems Security <sup>1</sup>	3
MIS 443	Project Management <sup>1</sup>	3
Subtotal		24
<b>Security Governance Electives</b>		

Select two of the following:		6
CSS 320	Security Risk and Emergency Management	
CSS 351	Fraud	
CSS 354	Risk Assessment and Fraud Prevention	
CPSC 450	Internship <sup>1</sup>	
Subtotal		6
<b>Total Hours</b>		<b>60</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes (Learning Community, Cap-Stone Course, Semester Projects)
2. Student-faculty research
3. Service Learning Courses
4. Internships
5. Volunteering (Summer Day Camps, Semester Workshops for K-12 students, Robot demos for visitors/local school districts)
6. Industry Awareness Night

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

CYBERSECURITY (6421)

Concentration in Security Governance (SEGV)

This program is effective as of Summer 2022

Revised 06.10.2022

UCC 03.01.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CPSC 130	Introduction to Computing and Programming	3
CYBR 101	Cybersecurity in the Era of Evolving Technology	3
ENGL 102	Critical Writing	3
ESAP 101	FIRST Seminar *	1

MATH 120 or SCI 101	Intermediate Algebra or Science of Life	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
CPSC 102	Collaborative Information Technology and Society	3
CPSC 146	Programming Principles	3
ENGL 104	Critical Reading	3
Select one of the following:		4
MATH 125	Precalculus	
MATH 225	Calculus I	
MATH 230	Calculus II	
MATH 231	Calculus III	
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
CPSC 207	Shell Commands and Scripting	3
CPSC 246 or CPSC 217	Advanced Programming Principles or Advanced Web Programming	3
Creative & Aesthetic Inquiry (p. 29)		3
SCI 101	Science of Life	3
Social Science Inquiry (p. 29)		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
CPSC 323	Fundamentals of Database Systems	3
CPSC 301	Practical Computer Security	3
SCI 102	Understanding the Physical World	3
CSS 120	Introduction to Private Security	3
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
CPSC 237	Mobile App Development for Smart Devices	3
CPSC 300	Challenges of Computer Technology	3
CSS 240	Security Management	3
Thematic Thread Requirement (p. 29)		3
Cyber Elective or Free Elective (p. 432)		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
CPSC 327	Administration and Security	3
CPSC 311	Discrete Computational Structures	3
CPSC 333	Introduction to Computer Forensics	3
Thematic Thread Requirement (p. 29)		3
Cyber Elective or Free Elective (p. 432)		3
<b>Hours</b>		<b>15</b>

**Fourth Year****Fall**

CPSC 423	Computer Networks	3
Thematic Thread Requirement (p. 29)		3
Cyber Elective or Free Elective (p. 432)		3
Cyber Elective or Free Elective (p. 432)		3
Cyber Elective or Free Elective (p. 432)		3
<b>Hours</b>		<b>15</b>

**Spring**

MIS 401	Information Systems Security	3
MIS 443	Project Management	3
Thematic Thread Requirement (p. 29)		3
Cyber Elective or Free Elective (p. 432)		4
<b>Hours</b>		<b>13</b>
<b>Total Hours**</b>		<b>120</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**Cyber Elective - CE Courses**

Code	Title	Hours
CSS 320	Security Risk and Emergency Management	3
CSS 351	Fraud	3
CSS 354	Risk Assessment and Fraud Prevention	3
CPSC 450	Internship <sup>1</sup>	1-12

<sup>1</sup> Jr. or Sr. Computing major with 3.0 GPA. Application required

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6421

Concentration Code: SEGV

Revised date: 06.10.2022

**Cybersecurity, Minor**

The Cybersecurity Minor is designed to offer students the necessary technical and non-technical knowledge to identify and adequately mitigate cybersecurity risks, arrange the secure use of computing resources, recognize security breaches, and proficiently use the tools and techniques for analysis and investigation of cybercrimes.

To access Minor Requirements, please view the Curriculum Guide tab.

**Related Links**

Cybersecurity, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/cybersecurity/>)

Computer Science Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/computer-science/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA REQUIREMENT

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.
- The Computing minor must submit this self-maintained curriculum guide to the Computer Science Department for verification.

Code	Title	Hours
<b>Core Requirements</b>		
CPSC 130	Introduction to Computing and Programming	3
CPSC 300 or MIS 300	Challenges of Computer Technology	3
CPSC 323 or MIS 323	Fundamentals of Database Systems Data Base Systems	3
CPSC 301 or MIS 301	Practical Computer Security	3
Select one of the following:		3
CPSC 333 or MIS 333	Introduction to Computer Forensics	
MIS 401	Information Systems Security	
CSS 120	Introduction to Private Security	3
CSS 240 or CSS 351	Security Management Fraud	3
<b>Total Hours</b>		<b>21</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Minor in Cybersecurity (14E)

This program is effective as of Fall 2016

Revised 02.08.2023

## Health Informatics, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

### RELATED LINKS

Health Informatics, Minor Program Page (<https://www.sru.edu/academics/colleges-and-departments/ces/departments/computer-science/programs/>)

Computer Science Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/computer-science/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Minor GPA: 2.0 or higher

### MINOR REQUIREMENTS

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.
- The Computing minor must submit this self-maintained curriculum guide to the Computer Science Department for verification.

Code	Title	Hours
<b>Core Requirements</b>		
CPSC 130 or CPSC 146	Introduction to Computing and Programming Programming Principles	3
CPSC 210	Productivity Software	3
CPSC 323	Fundamentals of Database Systems	3
CPSC 468	Software Engineering and Project Management	3
HLTH 103	Health and Behavior Change	3
HLTH 210	Introduction to Public Health	3
HLTH 312	Data Management for Health Science	3
STAT 152	Elementary Statistics I	3
<b>Total Hours</b>		<b>24</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Minor in Health Information (14F)

This program is effective as of Summer 2022

Revised 07.13.2022

UCC 03.21.2022

## Geography, Geology, and the Environment

Chair	Secretary	Location	Department Phone
Dr. Stentor Danielson	Cindy Schnur	319 Advanced Technology and Science Hall	724-738-2048

Department Web Site URL (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/geography-geology-and-the-environment/>)

Department Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/gge-fs.pdf>)

## The Rock Difference

Geology and Geography are recognized for their contributions to the better understanding of the earth, nature-society relations, and global and regional situations as well as local issues. Our department's educational mission is to advance the perspectives and insights of geology, geography, and environmental science and studies via high quality curricular programs for our majors and high quality rock studies courses for non-majors. Complementary missions are to extend knowledge in our disciplines through research and to provide service to the university and our region.

The Department of Geography, Geology, and the Environment offers a variety of field based perspectives on the study of the earth and people's relation to it. Students can focus on the physical nature of the earth, on the nature of places on the earth's surface, or on the geographic study of economic, political, and cultural processes. Or students may take a more interdisciplinary approach and integrate knowledge from many disciplines in the study of environmental issues.

## Faculty

### Patrick Burkhart

Professor  
Geography, Geology & Environm  
Ph.D., Lehigh University  
M.S., Wright State University  
B.A., Case Western Reserve

### Patricia Campbell

Associate Professor  
Geography, Geology & Environm  
Ph.D., University of Pittsburgh  
M.S., University of Pittsburgh  
B.S., University of Pittsburgh

### Xianfeng Chen

Associate Professor  
Geography, Geology & Environm  
Ph.D., West Virginia University  
M.S., Institute of Geography Chinese Academy of Sciences

B.S., Xinjian University (China)

### Stentor Danielson

Associate Professor  
Geography, Geology & Environm  
Ph.D., Clark University  
B.A., Colgate University

### Heike Hartmann

Professor  
Geography, Geology & Environm  
Ph.D., Justus Liebig University-Germany  
M.S., Justus Liebig University-Germany  
B.S., University of Wurzburg-Germany

### Robert Livingston

Associate Professor  
Geography, Geology & Environm  
Ph.D., University of Kansas  
M.A., University of Kansas  
B.A., Augusta College

### Tamra Schiappa

Professor  
Geography, Geology & Environm  
Ph.D., University of Idaho  
B.S., State University of New York at Plattsburgh

### Langdon Smith

Professor  
Geography, Geology & Environm  
Ph.D., University of Kansas  
B.S., University of Wyoming

### Julie Snow

Professor  
Geography, Geology & Environm  
Ph.D., University of Rhode Island  
M.S., University of Rhode Island  
B.S., Wittenberg University

### Jialing Wang

Associate Professor  
Geography, Geology & Environm  
Ph.D., Florida State University  
M.M.S., Nanjing University (China)  
B.S., Nanjing University (China)

## Programs

### Majors

- Environmental Geoscience, Bachelor of Arts (BA) (p. 445)
- Environmental Geoscience, Bachelor of Science (BA) / Pre-Master of Education (p. 449)
- Environmental Geoscience, Bachelor of Science (BS) - Concentration in Environmental Science (p. 453)
- Environmental Geoscience, Bachelor of Science (BS) - Concentration in Geology (p. 457)
- Geography, Bachelor of Science (BS) - Concentration in Applied Geographic Technology (p. 463)
- Geography, Bachelor of Science (BS) - Concentration in Environmental Studies & Sustainability (p. 466)

- Geography, Bachelor of Science (BS) - Concentration in Global Studies (p. 470)

## Minors

- Environmental Science, Minor (p. 460)
- Environmental Studies, Minor (p. 461)
- Geographic Information Technology, Minor (p. 462)
- Geology, Minor (p. 474)
- Geophysics, Minor (p. 475)
- Meteorology, Minor (p. 475)

## Certificates

- Geographic Information Science, Certificate (p. 462)
- Sustainability, Certificate (p. 476)

## Courses

### EGEO Courses

#### EGEO 100 - Environmental Geology

The course examines problems of mineral, energy and water resources, waste disposal, soils and health, geologic hazards, and land use. Resources are the common property of all people. Sustainable use of resources is poised by equitable distribution of cost and benefits among diverse peoples.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

#### EGEO 101 - Physical Geology

Emphasis is placed upon those processes acting to create earth materials, landforms, and structures in and on the earth.

Credits: 3

Term(s) Typically Offered: Offered as Needed

#### EGEO 110 - Environmental Geology Lab

Complement to EGEO 100; laboratory study of geologic hazards and geologic resources with a focus on local environmental issues. Course may require a weekend field trip.

Prerequisite: EGEO 100 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

#### EGEO 111 - Physical Geology Lab

Complement to EGEO 101; laboratory studies of minerals and rocks illustrate the concepts of EGEO 101.

Prerequisite: EGEO 101 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered as Needed

#### EGEO 121 - Meteorology/Lab

Introduction to principles controlling weather and their effect on people and the environment. Includes lab.

Credits: 4

Term(s) Typically Offered: Offered Fall & Spring Terms

#### EGEO 131 - Oceanography

Introduction to the physical, chemical and biological aspects of the marine environment.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

#### EGEO 139 - Foundations of Academic Discovery

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

#### EGEO 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

#### EGEO 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

#### EGEO 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

#### EGEO 201 - Earth Materials and Processes/Lab

Overview of the composition and structure of Earth. Introduction to fundamental physical and chemical Earth processes. Identification of rocks and minerals based on observation and study of physical properties. Includes lab.

Credits: 4

Term(s) Typically Offered: Offered Fall Terms



**EGEO 202 - Earth History/Lab**

The evolutionary history of the earth and its life. Two Saturday field trips required.

Prerequisite: EGEO 201<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Spring Terms

**EGEO 203 - Quantitative Methods**

Review of mathematical techniques and principles. Training in the application of quantitative methods to the understanding and analysis of geological and environmental problems. Students will apply a variety of mathematical techniques to a range of geological and environmental problems. Emphasis will be placed on practical applications of quantitative methodology and the development and use of spreadsheets to manage, analyze, and present data sets.

Prerequisites: EGEO 202<sup>D</sup> and (MATH 125<sup>D</sup> or MATH 225<sup>D</sup> or MATH 230<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**EGEO 221 - Weather and Climate Forecasting**

An analysis and use of local and regional computer-collected surface and upper air weather data to forecast weather. A study of past records of climate as clues to future changes. Includes lab.

Prerequisite: EGEO 121<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

**EGEO 231 - Aerial Photography Interpretation**

Introduction to photogrammetry, remote sensing, and interpretation of geologic and cultural imagery.

Prerequisites: EGEO 101<sup>D</sup> or EGEO 201<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

**EGEO 251 - Aviation Meteorology**

This course is a study of weather conditions commonly encountered in aviation. The subject is treated from the viewpoint of the forecaster and the pilot. Includes lab.

Prerequisite: EGEO 121<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

**EGEO 271 - Geotechniques: Lab**

Training in laboratory techniques and instruments for geological, geophysical and environmental surveys.

Credits: 2

**EGEO 272 - Introduction to Georeports/Lab**

Training in the grammatical and stylistic conventions of technical writing in environmental, geoscientific and geographical disciplines.

Prerequisite: ENGL 102<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

**EGEO 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**EGEO 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**EGEO 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**EGEO 303 - Paleontology/Lab**

An introduction to the fossil record and evolution of life through earth history, including the nature of science, marine and land dwelling organisms and basic theories of evolution and extinction of organisms.

Prerequisites: EGEO 201<sup>D</sup> and EGEO 202<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 323 - Planetary Geology**

Systematic study of geological processes that have operated on the planets, natural satellites, and minor bodies in the Solar System. Course will cover solar system formation and evolution, planetary interiors, surficial processes, the structure and history of individual planetary bodies. Quantitative techniques will be used to examine data from current and historic exploration missions.

Prerequisites: EGEO 202<sup>D</sup> and EGEO 203<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 327 - Structural Geology**

Origin and description of primary and secondary structures of sedimentary, igneous, and metamorphic rocks.

Prerequisites: EGEO 201<sup>D</sup> and (EGEO 202<sup>D</sup> or PNGE 201<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 328 - Plate Tectonics**

Plate tectonics is the study of the motion of the lithosphere and deformation of the earth's crust on a regional scale. The course will evaluate the plate tectonic paradigm in terms of its historical evolution and modern application to understanding earth processes. The course examines a broad range of tectonic phenomena and considers the specific geological and geophysical processes involved. Topics covered include the uplift, deformation and metamorphism of mountain belts, the formation of ocean basins, the subsidence of sedimentary basins, the collision of continents and volcanic arcs, earthquake seismology of plate boundaries, magmatism related to plate processes, and tectonics and landscapes.

Prerequisite: EGEO 202<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 340 - Air Pollution Meteorology**

A study of meteorological parameters of air pollution concentration, dispersion, and removal. Includes air pollution forecasting and modeling.

Prerequisite: EGEO 121<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 341 - Geomorphology/Lab**

A study of landforms, their origin and relation to geologic processes, structure and climate.

Prerequisites: EGEO 201<sup>D</sup> or GES 150<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 342 - Glacial Geology/Lab**

A study of erosional and depositional landforms left by glaciers and their meltwaters. Glacial landforms and soils are examined on maps, air photos and in the field.

Prerequisites: GES 150<sup>D</sup> or EGEO 202<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 351 - Mineralogy/Lab**

Systematic crystallography, crystal chemistry, physics, genesis, occurrence, and identification of minerals.

Prerequisites: EGEO 201<sup>D</sup> and CHEM 108<sup>D</sup> and CHEM 112<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Fall Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 352 - Petrology/Lab**

Classification, occurrence, and genesis of igneous, sedimentary and metamorphic rocks. Identification using hand specimens and polarizing microscope (thin sections).

Prerequisite: EGEO 351<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 358 - Introduction to Geophysics/Lab**

An introduction to geophysics and geophysical methods and their use in the study of Earth's interior. Emphasis will be placed on illuminating subsurface geological features and applications in fields such as groundwater studies, development of energy resources and environmental studies.

Prerequisites: PHYS 211<sup>C</sup> and MATH 225<sup>C</sup> and EGEO 201<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 360 - Introduction to Hydrology/Lab**

A study of the occurrence and movement of water and human's effect on this basic resource.

Prerequisite: EGEO 201<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 362 - Stratigraphy/Lab**

Principles of stratigraphy, stratigraphic mapping, and graphic techniques used in stratigraphic interpretation. Two Saturday field trips may be required.

Prerequisites: EGEO 201<sup>D</sup> and EGEO 202<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Fall Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 368 - Women in Science**

This course will explore the issues of women in science. Specifically it will address the issues of gender in relation to the theory and practice of science and technology. The course content will use case studies to explore women that have made significant contributions to science despite barriers limiting their access to education and professional organizations. The content will cover topics including how the development of educational systems and professions affected women over the centuries, how scientific approaches have evolved, and how women meet challenges in today's scientific community. The case studies will provide students with the opportunity to analyze and synthesize the information presented into an understanding on the evolution of scientific thought and women's roles in science.

Credits: 3

Term(s) Typically Offered: Offered Winter Terms

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 399 - Field Camp**

Field Camp is a final requirement and is usually conducted at a field study location.

Credits: 1-9

Term(s) Typically Offered: Offered as Needed

**EGEO 448 - X-ray Spectrometry**

Concepts of x-ray production and interaction with crystalline materials. Application of x-ray diffraction methods for identification of minerals, and x-ray fluorescence techniques for chemical analysis. One lecture and one two-hour laboratory per week.

Prerequisites: EGEO 201<sup>D</sup> and CHEM 107<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 450 - Internship**

Supervised placement and research in selected public and private agencies. Permission of chairperson.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 451 - Geochemistry/Lab**

Basic thermodynamics applied to the geochemistry of natural systems. The course will focus on low temperature inorganic reactions that are important for the environmental fate and transport of contaminants in the environment. The course will require the use of computer spreadsheets and models to solve geochemical problems covered in lecture. Three hours of lecture and one hour of computer lab.

Prerequisites: EGEO 201<sup>D</sup> and CHEM 108<sup>D</sup> and CHEM 112<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Fall Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 453 - Geotechniques: Geochemistry**

Laboratory and field experiments to study the geochemistry of local environmental systems. Field sampling, in-field and laboratory analysis, and construction of experimental systems will be conducted. Field trips for sample collection will occur weekly.

Prerequisite: EGEO 451<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 458 - Geophysical Field Methods/Lab**

An introduction to seismic field methods and their use in the study of Earth's interior. Emphasis will be placed on the use of seismic methods to characterize subsurface geological features and applications in fields such as groundwater studies, development of energy resources and environmental studies.

Prerequisite: EGEO 358<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 460 - Hydrogeology**

A study of the quantitative and qualitative interrelationships of geologic materials and processes with ground water.

Prerequisite: EGEO 360<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 469 - Field Investigations in the Geosciences**

This course will provide students with the opportunity to practice the nature of fieldwork by observing, interpreting, collecting data and analyzing physical and human landscapes, and the natural, cultural and economic forces that are shaping them.

Credits: 1-3

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 476 - Geotechniques: Geophysics**

Lab and field techniques.

Prerequisite: EGEO 460 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): EGEO 327

Credits: 1

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

**EGEO 481 - Geologic Map Interpretation**

A seminar for advanced undergraduates in whom students and staff participate in map interpretation. One two-hour lab per week. Senior standing or permission of the instructor.

Corequisite(s): EGEO 362

Credits: 1

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

**EGEO 482 - Senior Seminar**

A seminar for advanced undergraduates in which students and staff participate in discussions concerning classical and current geological problems. Senior standing or permission of the instructor.

Credits: 1

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 490 - Independent Study**

Independent work on a topic in the earth sciences selected by the student with permission and advice of the instructor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENVS Courses****ENVS 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**ENVS 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ENVS 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**ENVS 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ENVS 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ENVS 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**ENVS 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ENVS 311 - Environmental Monitoring and Sampling**

The course will focus on the development and implementation of successful sampling plans for water, soil and sediment. Basic sampling and analysis methods will be presented followed by hands-on field exercises employing these techniques. Field notebook documentation and report preparation will be emphasized. At least one field trip will be scheduled for a Saturday during the semester to give students hands-on experience with collection of environmental sample

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with department of Chemistry, Geography, Geology & Environm or Biology.

**ENVS 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENVS 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENVS 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENVS 440 - Science, Technology and the Environment**

A scientific study of interactions of global systems in the geosphere and biosphere. Selected global problems, such as waste production and disposal, energy use, atmospheric warming, ozone depletion, and acid deposition are analyzed along with possible alternatives. Four courses completed in the natural sciences and mathematics area of the liberal studies program.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENVS 450 - Environmental Science Internship**

Academic credit may be earned through a practicum experience, working for an agency or business. A minimum of 16 credits completed in the major and approval of the agency or business, the program director and the advisor.

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENVS 480 - Environmental Systems Analysis**

The student will investigate an environmental problem in conjunction with an appropriate faculty member as a research project. A minimum of 16 credits completed in the major and the approval of the program director and the advisor.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENVS 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENVS 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENVS 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



## GES Courses

### GES 105 - World Regional Geography

This course provides an introduction to the regional concept, classification of major culture regions throughout the world and a description of the physiocultural character of those regions.

Credits: 3

Term(s) Typically Offered: Offered as Needed

### GES 115 - Introduction to Geospatial Technologies

Provides fundamental concepts and basic skills regarding map use and interpretation. Overview of major geospatial technologies, including geographic information systems, global positioning systems, spatial visualization, and remote sensing.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

### GES 135 - Introduction to Environmental Problems

An introduction to some of the more crucial environmental problems and alternative solutions that are available.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

### GES 139 - Foundations of Academic Discovery

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

### GES 150 - The Natural Environment

An introduction to interrelationships among the physical elements of the environment, including the study of vegetation, soils and landforms.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment is limited to students with a program in Environmental Studies or Geography.

### GES 170 - Discover Geography

An inquiry course that examines why people live differently in different parts of the world, with respect to political and economic systems, culture, demographics, and relationships with the natural world. This course introduces students to topics and methods of human geography, and enables students to apply them to addressing important global, regional, and local social issues.

Credits: 3

Term(s) Typically Offered: Offered Every Term

### GES 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

### GES 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

### GES 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

### GES 201 - Latin America and the Caribbean

Consideration is given to physical, historical, cultural, political, and economic patterns in Latin America and the Caribbean.

Credits: 3

Term(s) Typically Offered: Offered as Needed

### GES 202 - United States and Canada

An introductory course that surveys the patterns, connections, and evolution of environments, cultures, and economies of the U.S. and Canada.

Credits: 3

Term(s) Typically Offered: Offered as Needed

### GES 204 - Post-Soviet Union

Study of the Soviet Union and Soviet-bloc nations with emphasis on economic, physical, political, and cultural aspects.

Credits: 3

Term(s) Typically Offered: Offered as Needed

### GES 205 - Cultural Geography

This course serves as an introduction to human, social and cultural geography. Course content will cover cultural landscapes and place identity, discourses and cultural interpretation of the environment, the cultural and spatial impacts of demographic and economic changes, and cultural contestation over space and place.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

**GES 215 - Planning for Sustainable Communities**

An introduction to social and physical planning for rural areas, towns and cities.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course

**GES 220 - General Methods of Fieldwork**

A survey of how field research is done in geography, including designing a research question, data collection techniques, and qualitative and quantitative data analysis.

Prerequisite: GES 115 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**GES 235 - Conservation**

An examination of the earth's complex resource base which places special emphasis on the geographic location of resources and on conservation/preservation practices.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Transfer Thread Completion Course

**GES 242 - Geography of Religion**

The distribution and arrangement of world religions, giving consideration to the comparative influence of religion on the cultural landscape and on regional development.

Credits: 3

**GES 245 - Population and Resources**

Basic demographic principles and their relationship to regional development.

Credits: 3

**GES 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**GES 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**GES 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**GES 301 - Geography of Rural Areas**

Analyzes the structure and primary functional patterns of rural areas, with an emphasis on agricultural and industrial land use, problems of rural development, and population shifts.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 303 - Asia**

A survey of the major regions of Asia emphasizing their physical, cultural, and political characteristics. Several countries are selected for special emphasis.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Thematic Thread(s): Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 305 - Environmental Economic Geography**

Environmental economic geography takes a geographical approach to the interface between nature and the economy, with an emphasis on patterns and trends in environmental services and resource management.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 307 - Australia**

This course will introduce students to the environments and peoples of Australia. Australia's natural environment, Aboriginal and white culture, economy, politics, and major current public issues will be covered.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 308 - Europe**

The evolution of nations, the cultural landscape, and the spatial-economic organization of Europe.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 309 - Africa**

This course surveys the patterns, connections, and evolution of environments, cultures, nations, and economies of Africa, with an emphasis on maps, regions, and images.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 310 - Urban Geography**

The course is designed to provide insights into the nature of cities and smaller urban places.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 315 - Cartography I**

Basic elements of computer-assisted thematic map design are discussed. Cartographic projects serve as a means of applying major concepts such as map projections, data classification, color theory, and qualitative/quantitative symbology. Includes a lab.

Prerequisite: GES 115<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 321 - Introduction to UAS for Remote Sensing and Monitoring**

This course introduces students to Unmanned Aerial Systems and their use in acquisition of remotely sensed data. Course content will cover topics necessary for students to sit for the FAA Part 107 Commercial Remote Pilot Certification examination. Students will also be introduced to basic concepts of remote sensing and aerial imaging, UAS mission planning and spatial data processing.

Prerequisite: GES 115<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1 or Freshman 2 may **not** enroll.

**GES 324 - Environmental Law and Policy**

The study of political control of the environment. Focus on the roles played by individuals and groups. Cross-listed with POLS 324.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 325 - Introduction to Geographic Information Science**

This course introduces students to integrated computer tools for the capture, storage, manipulation, analysis, and printout of earth-referenced data. Computers are used to store maps, analyze maps, and produce new maps along with their attributes to address societal issues. Includes a lab.

Prerequisite: GES 115<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Transfer Thread Completion Course

Students with a semester level of Freshman 1 or Freshman 2 may **not** enroll.

**GES 330 - Political Geography**

The effects of politics on geography and the effects of geographic factors on politics.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 331 - Economic Geography**

Examines human use and economic organization of the earth.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 344 - Environmental Justice**

This course will teach students to evaluate situations as just or unjust according to well-understood principles of environmental justice. Students will apply this analysis to important environmental justice topics such as unequal distribution of environmental harms and resources, treatment of indigenous people, animal and ecosystem rights and international environmental negotiations.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 345 - Population Analysis**

A study of the techniques of population analysis with respect to growth, distribution, fertility, migration, and other demographic characteristics. Some background in algebra or statistics.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 355 - Earth's Changing Climate**

This course examines the interrelationship between climate and human activities. We will study the processes that control Earth's climate with a focus on the flow of energy through the Earth system and a study of the interactions between the atmosphere, the ocean, and the land surface. We will investigate climate change on variable time scales with a focus on how climate affects humans and the environment. Further, we will examine which factors influence society's decisions in response to climate change.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 356 - Earth's Changing Climate Laboratory**

This course examines Earth's climate changes through an investigation of climate data and climate models. We will investigate climate change on variable time scales and in different geographic regions with a quantitative focus.

Prerequisite: GES 355 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Geography, Geology & Environm.

**GES 361 - Gender and the Environment**

Gender and the Environment will explore the ways that human interaction with the natural environment is shaped by gender roles and gender inequality in cultures around the world. Topics covered will include gender differences in resource access, connections between environmental degradation and women's oppression, cultural metaphors that link nature and gender (e.g. "mother earth") and the way that gender shapes environmental movements.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Thematic Thread(s): Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 362 - Applications in Sustainability**

This course explores the history of the sustainability movement, and the current and emerging science and practices of sustainability. Students will also be introduced to the research tools and methods needed to evaluate the sustainability of energy systems, technology, the built environment and environmental regulations and policy.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 363 - Energy and Society**

Students will develop a working knowledge of energy technologies and policies, and their impacts on both the environment and society. Discussions and case studies will include analysis of current and emerging energy sources and consumption.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 375 - Geography of Intolerance**

Analyzes cross-culturally the impact on resource allocation and the spatial implications of gender, racial, religious, political and class discrimination.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 410 - Remote Sensing**

Covers the electromagnetic and thermal properties of earth objects, principles and operations of sensors, and the practical applications of remote sensing. Lectures will be supplemented with exercises requiring computer processing of satellite data.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 415 - Cartography II**

Advanced issues and theory of cartographic design are discussed. Cartographic applications include flow maps, bivariate statistical mapping, cartograms, interactive maps, and map animation. Includes a lab.

Prerequisite: GES 315<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 420 - Historical Geography of Anglo-America**

A study of settlement patterns, land utilization, and sequent occupancies for selected periods since 1500. A student is expected to have background in geography and American history.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 425 - Advanced Geographic Information Systems**

This course investigates and applies advanced Geographic Information Systems (GIS) techniques. Students will learn current techniques for the collection, evaluation, input, analysis, and output of spatial data with various GIS tools. Students will apply these techniques to real world problems in areas such as environmental monitoring, environmental modeling, urban planning, and economic location. Includes a lab.

Prerequisites: (GES 325<sup>D</sup> or GES 410<sup>D</sup>) and GES 315<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 426 - Environmental Modeling**

Environmental models quantify processes such as runoff generation, water pollution, erosion, landscape change, and change of biodiversity. In this course, these models will be applied to real-world examples. Includes a lab.

Prerequisite: GES 325<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 435 - Preservation Planning**

A study of the American preservation movement as it relates to features of the cultural landscape. The origin and diffusion of building styles and the methods and problems associated with their preservation are emphasized.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 444 - World Environmental Cultures**

Students will explore and evaluate geographic and environmental ideas from western and non-western cultures.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Thematic Thread(s): Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 445 - Regional Planning**

Deals with planning for the future of regions that are larger than any single local government. Consideration is given to economic development, land use, transportation, and other regional planning concerns. Cross-listed with PUBA 445.

Prerequisites: GES 215<sup>D</sup> or PUBA 215<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 450 - Internship**

Supervised placement and field experience in a selected public or private agency.

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 469 - Field Investigations in the Geosciences**

This course will provide students with the opportunity to practice the nature of fieldwork by observing, interpreting, collecting data and analyzing physical and human landscapes, and the natural, cultural and economic forces that are shaping them.

Credits: 1-3

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 489 - Applied Geospatial Technologies**

This course involves the application of geospatial technologies in humanities, social sciences, and natural and environmental sciences.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 490 - Independent Study**

In-depth reading and/or research with the guidance of a faculty member in an area selected by the student. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**GES 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Environmental Geoscience, Bachelor of Arts (BA)

The environmental geoscience (BA) focuses on providing students with a scientific understanding of the Earth and surrounding environment. The student in geology gains an understanding of the various terrestrial



processes and features (mountains, oceans, volcanoes, glaciers); the immenseness of geologic time, the history of the earth and organisms that inhabit it (fossils); the role of water, fuel, and mineral resources in the development of civilization; and the close interaction between the geologic and organic environments.

Students seeking state certification in secondary education must also complete requirements for a Master of Education degree, a one-year program at SRU. All of our programs are designed to steadily develop the quantitative, deductive and inductive reasoning skills that environmental geoscientists must have.

## Program Learning Outcomes

### Environmental Geoscience, BA

- **Outcome 1 (EGEO):** Each graduate shall develop general knowledge and understanding of the composition, history, and structure of the planet, and of the physical, chemical, and biological processes involved in the interactions between the geosphere, hydrosphere, atmosphere, and biosphere.
  - Each graduate will demonstrate an understanding of plate tectonic theory and be able to describe how it operates
  - Each graduate will demonstrate an understanding of the geologic time scale and the timing of major events in Earth history
  - Each graduate will demonstrate the ability to characterize and identify important rocks and minerals, and to interpret the processes by which they formed
  - Each graduate will demonstrate an understanding of the history, causes, and effects of global climate change
  - Each graduate will demonstrate an understanding of evolutionary theory and its evidence in the fossil record
  - Each graduate will demonstrate an understanding of the internal structure of Earth
  - Each graduate will be able to explain the fundamental principles of the hydrologic cycle

### Geology, Geology, and the Environment, Overall

- **Outcome 1:** Each graduate will develop strong written and oral communication skills, demonstrate the ability to work in a collaborative environment, and exhibit professional attitudes and behavior.
  - Each graduate will deliver oral presentations, demonstrating the ability to effectively communicate discipline-specific concepts
  - Each graduate will write scholarly papers using acceptable format and organization with proper citations to appropriate literature.
  - Each graduate will actively participate in collaborative projects and in academic field trips
  - Each graduate will demonstrate professionalism and integrity in his/her academic conduct
  - Each graduate shall develop the ability to respect and integrate diverse worldviews in problem-solving frameworks
- **Outcome 2:** Each graduate shall possess and apply critical thinking and problem solving skills.
  - Each graduate will demonstrate the ability to develop valid research questions and hypotheses
  - Each graduate will demonstrate the ability to apply proper techniques for data acquisition and interpretation in a problem-solving context

- Each graduate will demonstrate the ability to solve open-ended problems using scientific methodology
- Each graduate will develop the ability to make informed, scientifically-based decisions regarding environmental issues
- **Outcome 3:** Each graduate shall develop skills in quantitative, qualitative, technological, laboratory, and field procedures.
  - Each graduate will learn and employ accepted laboratory and field techniques, protocols, and safety procedures
  - Each graduate will learn to read, construct, and comprehend thematic maps and derive perspective output from a map
  - Each graduate will demonstrate the ability to apply knowledge, concepts and techniques from complementary disciplines to solve problems

## Related Links

Environmental Geoscience, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/environmental-geosciences/>)

Geography, Geology, and the Environment Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/geography-geology-and-the-environment/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	43-45
	Modern Language Requirement	0-9
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	43-48
	Natural Science and Math College-Wide Requirements	12
	Electives	22

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 125 or MATH 225	Precalculus Calculus I	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16

**Integrated Inquiry***Creative and Aesthetic Inquiry*

Select 3 Credits (p. 29) 3

*Humanities Inquiry*

Select 3 Credits (p. 29) 3

*Social Science Inquiry*

Select 3 Credits (p. 29) 3

*Natural Sciences Inquiry*

Select one of the following: 3-4

SCI 101 Science of Life

CHEM 1xx 100 Level Chemistry &amp; Lab

BIOL 1xx 100 Level Biology &amp; Lab

*Physical Science Inquiry*

Select one of the following: 3-4

SCI 102 Understanding the Physical World

EGEO 1xx 100 Level Environmental Geoscience &amp; Lab

Subtotal 15-17

**Thematic Thread**Select 12 Credits (p. 29)<sup>2</sup> 12**Total Hours 43-45**<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.**BA Modern Language Requirement**

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
Complete 0-9 credits		0-9
<b>Total Hours</b>		<b>0-9</b>

**Basic Math Requirement**

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

**Computer Competency**

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		

CPSC 100	Introduction to Computing for Liberal Arts
CPSC 110	Computer Concepts
CPSC 130	Introduction to Computing and Programming
PE 202	Technology for Wellness

**Total Hours 0-3****DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT**

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

**Major Requirements**

- 22 major credits must be taken at SRU or PASSHE
- 22 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Core Major Requirements</b>		
EGEO 1XX	Any 100-level EGEO course	3-4
EGEO 201	Earth Materials and Processes/Lab	4
EGEO 202	Earth History/Lab	4
EGEO 272	Introduction to Georeports/Lab	1
GES 115	Introduction to Geospatial Technologies	3
GES 205	Cultural Geography	3
GES 324	Environmental Law and Policy	3
GES 325	Introduction to Geographic Information Science	3
Subtotal		24-25

**Capstone Experience**

Select one of the following:		3
GES 444	World Environmental Cultures	
EGEO 469	Field Investigations in the Geosciences	
or GES 469	Field Investigations in the Geosciences	
EGEO 450	Internship	
or GES 450	Internship	
Subtotal		3

**Focus Area**

Choose 10 credits from one of the following Focus Areas: 10

*A: Geology*

Select 10 credits (p. 448)

*B: Geospatial Technology*

Select 10 credits (p. 448)

*C: Environmental Science*

Select 10 credits (p. 448)

*D: Global Studies*

Select 10 credits (p. 448)

*E: Sustainable Communities*

Select 10 credits (p. 448)

Subtotal 10

**Electives**

Any EGEO or GES 300 OR 400-level course	3-4
Any EGEO or GES 300 OR 400-level course	3-4

Subtotal	6-8
<b>Total Hours</b>	<b>43-46</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Geology

Code	Title	Hours
EGEO 303	Paleontology/Lab	4
EGEO 362	Stratigraphy/Lab	4
EGEO 327	Structural Geology	4
EGEO 328	Plate Tectonics	3
EGEO 358	Introduction to Geophysics/Lab	3
EGEO 342	Glacial Geology/Lab	3
EGEO 351	Mineralogy/Lab	4
EGEO 341	Geomorphology/Lab	3

### Geospatial Technology

Code	Title	Hours
GES 315	Cartography I	3
GES 321	Introduction to UAS for Remote Sensing and Monitoring	3
GES 410	Remote Sensing	3
GES 415	Cartography II	3
GES 425	Advanced Geographic Information Systems	3
GES 426	Environmental Modeling	3

### Environmental Science

Code	Title	Hours
EGEO 131	Oceanography	3
EGEO 360	Introduction to Hydrology/Lab	3
EGEO 340	Air Pollution Meteorology	3
EGEO 451	Geochemistry/Lab	4
EGEO 460	Hydrogeology	3
GES 355 & GES 356	Earth's Changing Climate and Earth's Changing Climate Laboratory	4

### Global Studies

Code	Title	Hours
GES 201	Latin America and the Caribbean	3
GES 303	Asia	3
GES 307	Australia	3
GES 331	Economic Geography	3
GES 345	Population Analysis	3
GES 355 & GES 356	Earth's Changing Climate and Earth's Changing Climate Laboratory	4

### Sustainable Communities

Code	Title	Hours
GES 215	Planning for Sustainable Communities	3
GES 235	Conservation	3
GES 344	Environmental Justice	3
GES 362	Applications in Sustainability	3
GES 361	Gender and the Environment	3

GES 355 & GES 356	Earth's Changing Climate and Earth's Changing Climate Laboratory	4
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### Natural Science and Math College-Wide Requirements

Code	Title	Hours
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
MATH 125 or MATH 225	Precalculus Calculus I	4
PHYS 201 or PHYS 216	Elements of Physics I with Lab University Physics 1 with Lab	4
<b>Total Hours</b>		<b>12</b>

### Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. Student-faculty research
3. Service Learning Courses
4. Internships
5. Volunteering

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Environmental Geosciences - BA (6 35)  
w/optional Pre Masters in Education (7-12) (PX)

This program is effective as of Fall 2020.

Revised 12.06.2021

UCC 10.26.2021

### Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
GES 115	Introduction to Geospatial Technologies	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
EGEO 131	Oceanography	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
<b>Hours</b>		<b>13</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
EGEO 201	Earth Materials and Processes/Lab	4

Creative & Aesthetic Inquiry (p. 29)	3
CHEM 107 General Chemistry I & CHEM 111 and General Chemistry I Lab	4
Free elective/minor	3
<b>Hours</b>	<b>17</b>

**Second Year****Fall**

EGEO 202 Earth History/Lab	4
Social Science Inquiry (p. 29)	3
Major elective	3-4
MATH 125 Precalculus	4
Free elective/minor	3
Declare a Thematic Thread <sup>2</sup>	
<b>Hours</b>	<b>17-18</b>

**Spring**

EGEO 272 Introduction to Georeports/Lab	1
GES 205 Cultural Geography	3
Select one of the following:	3
COMM 200 Civil Discourse: Theory & Practice	
PHIL 110 Ethics and Civil Discourse	
POLS 235 Civil Discourse and Democracy	
Humanities Inquiry (p. 29)	3
Thematic Thread Requirement (p. 29)	3
<b>Hours</b>	<b>13</b>

**Third Year****Fall**

Major elective	3-4
Thread course	3
Free elective/minor	3
Free elective/minor	3
Free elective/minor	3
<b>Hours</b>	<b>15-16</b>

**Spring**

GES 325 Introduction to Geographic Information Science	3
GES 324 Environmental Law and Policy	3
Thematic Thread Requirement (p. 29)	3
Major elective	3-4
Major elective	3
<b>Hours</b>	<b>15-16</b>

**Fourth Year****Fall**

GES 444 World Environmental Cultures	3
Major elective	3-4
Thematic Thread Requirement (p. 29)	3
Free elective/minor	3
<b>Hours</b>	<b>12-13</b>

**Spring**

Major elective (if needed)	0-3
Free elective/minor	3
Free elective/minor	3
Free elective/minor	3

Free elective/minor	9
<b>Hours</b>	<b>18-21</b>
<b>Total Hours**</b>	<b>120-127</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6 35

Revised: 08.27.2021

## Environmental Geoscience, Bachelor of Science (BA) / Pre-Master of Education

The environmental geoscience (BA) focuses on providing students with a scientific understanding of the Earth and surrounding environment. The student in geology gains an understanding of the various terrestrial processes and features (mountains, oceans, volcanoes, glaciers); the immenseness of geologic time, the history of the earth and organisms that inhabit it (fossils); the role of water, fuel, and mineral resources in the development of civilization; and the close interaction between the geologic and organic environments.

Students seeking state certification in secondary education must also complete requirements for a Master of Education degree, a one-year program at SRU. All of our programs are designed to steadily develop the quantitative, deductive and inductive reasoning skills that environmental geoscientists must have.

## Requirements for the Certification

Teacher certification is earned through the master of education degree at Slippery Rock University. Students seeking secondary school teaching certification in earth and space science must earn a bachelor of arts or a bachelor of science degree in discipline and contact the Department of Secondary Education/Foundations of Education concerning its graduate program in education. Information about this program, including prerequisites for admission, may be obtained from the Secondary Education/Foundations of Education office in 114 McKay Education Building.

## Program Learning Outcomes

### Environmental Geoscience, BA

- **Outcome 1 (EGEO):** Each graduate shall develop general knowledge and understanding of the composition, history, and structure of the planet, and of the physical, chemical, and biological processes involved in the interactions between the geosphere, hydrosphere, atmosphere, and biosphere.
  - Each graduate will demonstrate an understanding of plate tectonic theory and be able to describe how it operates

- Each graduate will demonstrate an understanding of the geologic time scale and the timing of major events in Earth history
- Each graduate will demonstrate the ability to characterize and identify important rocks and minerals, and to interpret the processes by which they formed
- Each graduate will demonstrate an understanding of the history, causes, and effects of global climate change
- Each graduate will demonstrate an understanding of evolutionary theory and its evidence in the fossil record
- Each graduate will demonstrate an understanding of the internal structure of Earth
- Each graduate will be able to explain the fundamental principles of the hydrologic cycle

## Geology, Geology, and the Environment, Overall

- **Outcome 1:** Each graduate will develop strong written and oral communication skills, demonstrate the ability to work in a collaborative environment, and exhibit professional attitudes and behavior.
  - Each graduate will deliver oral presentations, demonstrating the ability to effectively communicate discipline-specific concepts
  - Each graduate will write scholarly papers using acceptable format and organization with proper citations to appropriate literature.
  - Each graduate will actively participate in collaborative projects and in academic field trips
  - Each graduate will demonstrate professionalism and integrity in his/her academic conduct
  - Each graduate shall develop the ability to respect and integrate diverse worldviews in problem-solving frameworks
- **Outcome 2:** Each graduate shall possess and apply critical thinking and problem solving skills.
  - Each graduate will demonstrate the ability to develop valid research questions and hypotheses
  - Each graduate will demonstrate the ability to apply proper techniques for data acquisition and interpretation in a problem-solving context
  - Each graduate will demonstrate the ability to solve open-ended problems using scientific methodology
  - Each graduate will develop the ability to make informed, scientifically-based decisions regarding environmental issues
- **Outcome 3:** Each graduate shall develop skills in quantitative, qualitative, technological, laboratory, and field procedures.
  - Each graduate will learn and employ accepted laboratory and field techniques, protocols, and safety procedures
  - Each graduate will learn to read, construct, and comprehend thematic maps and derive perspective output from a map
  - Each graduate will demonstrate the ability to apply knowledge, concepts and techniques from complementary disciplines to solve problems

## Related Links

Environmental Geoscience - Pre-Masters of Education, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/environmental-geosciences-pre-masters-of-education/>)

Geography, Geology, and the Environment Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/geography-geology-and-the-environment/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	43-45
	Modern Language Requirement	0-9
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	43-48
	Concentration Requirements	6
	Natural Science and Math College-Wide Requirements	12
	Electives	22

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 125	Precalculus	4
or MATH 225	Calculus I	
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
Select one of the following:		3-4
SCI 101	Science of Life	
CHEM 1xx	100 Level Chemistry & Lab	
BIOL 1xx	100 Level Biology & Lab	
<i>Physical Science Inquiry</i>		
Select one of the following:		3-4
SCI 102	Understanding the Physical World	
EGEO 1xx	100 Level Environmental Geoscience & Lab	
Subtotal		15-17
<b>Thematic Thread</b>		



Select 12 Credits (p. 29) <sup>2</sup>	12
<b>Total Hours</b>	<b>43-45</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
Complete 0-9 credits		0-9
<b>Total Hours</b>		<b>0-9</b>

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 22 major credits must be taken at SRU or PASSHE
- 22 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Core Major Requirements</b>		
EGEO 1XX	Any 100-level EGEO course	3-4

EGEO 201	Earth Materials and Processes/Lab	4
EGEO 202	Earth History/Lab	4
EGEO 272	Introduction to Georeports/Lab	1
GES 115	Introduction to Geospatial Technologies	3
GES 205	Cultural Geography	3
GES 324	Environmental Law and Policy	3
GES 325	Introduction to Geographic Information Science	3
<b>Subtotal</b>		<b>24-25</b>

### Capstone Experience

Select one of the following:		3
GES 444	World Environmental Cultures	
EGEO 469	Field Investigations in the Geosciences	
or GES 469	Field Investigations in the Geosciences	
EGEO 450	Internship	
or GES 450	Internship	
<b>Subtotal</b>		<b>3</b>

### Focus Area

Choose 10 credits from one of the following Focus Areas: 10

#### A: Geology

Select 10 credits (p. 451)

#### B: Geospatial Technology

Select 10 credits (p. 452)

#### C: Environmental Science

Select 10 credits (p. 452)

#### D: Global Studies

Select 10 credits (p. 452)

#### E: Sustainable Communities

Select 10 credits (p. 452)

**Subtotal** 10

### Electives

Any EGEO or GES 300 OR 400-level course	3-4
Any EGEO or GES 300 OR 400-level course	3-4
<b>Subtotal</b>	<b>6-8</b>

**Total Hours** 43-46

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Geology

Code	Title	Hours
EGEO 303	Paleontology/Lab	4
EGEO 362	Stratigraphy/Lab	4
EGEO 327	Structural Geology	4
EGEO 328	Plate Tectonics	3
EGEO 358	Introduction to Geophysics/Lab	3
EGEO 342	Glacial Geology/Lab	3
EGEO 351	Mineralogy/Lab	4
EGEO 341	Geomorphology/Lab	3

**Geospatial Technology**

Code	Title	Hours
GES 315	Cartography I	3
GES 321	Introduction to UAS for Remote Sensing and Monitoring	3
GES 410	Remote Sensing	3
GES 415	Cartography II	3
GES 425	Advanced Geographic Information Systems	3
GES 426	Environmental Modeling	3

**Environmental Science**

Code	Title	Hours
EGEO 131	Oceanography	3
EGEO 360	Introduction to Hydrology/Lab	3
EGEO 340	Air Pollution Meteorology	3
EGEO 451	Geochemistry/Lab	4
EGEO 460	Hydrogeology	3
GES 355 & GES 356	Earth's Changing Climate and Earth's Changing Climate Laboratory	4

**Global Studies**

Code	Title	Hours
GES 201	Latin America and the Caribbean	3
GES 303	Asia	3
GES 307	Australia	3
GES 331	Economic Geography	3
GES 345	Population Analysis	3
GES 355 & GES 356	Earth's Changing Climate and Earth's Changing Climate Laboratory	4

**Sustainable Communities**

Code	Title	Hours
GES 215	Planning for Sustainable Communities	3
GES 235	Conservation	3
GES 344	Environmental Justice	3
GES 362	Applications in Sustainability	3
GES 361	Gender and the Environment	3
GES 355 & GES 356	Earth's Changing Climate and Earth's Changing Climate Laboratory	4

**Natural Science and Math College-Wide Requirements**

Code	Title	Hours
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
MATH 125 or MATH 225	Precalculus Calculus I	4
PHYS 201 or PHYS 216	Elements of Physics I with Lab University Physics 1 with Lab	4
<b>Total Hours</b>		<b>12</b>

**Recommended Courses for Optional Environmental Geoscience Pre Masters in Education**

Code	Title	Hours
SPED 121	Overview of Special Education	3
SEFE 338	Standards-Based Instruction & Assessment in the Inclusionary Classroom	3

Consult your adviser for additional courses

**Co-curricular and Experiential Learning**

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. Student-faculty research
3. Service Learning Courses
4. Internships
5. Volunteering

**Important Curriculum Guide Notes**

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Environmental Geosciences - BA (6 35)  
w/optional Pre Masters in Education (7-12) (PX)  
This program is effective as of Fall 2019.  
Revised 07.08.2022  
UCC 10.26.2021

**Recommended Four-Year Plan**

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
GES 115	Introduction to Geospatial Technologies	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
EGEO 131	Oceanography	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
<b>Hours</b>		<b>13</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
EGEO 201	Earth Materials and Processes/Lab	4
Creative and Aesthetic Inquiry		3
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
Free elective/minor		3
<b>Hours</b>		<b>17</b>

**Second Year****Fall**

EGEO 202	Earth History/Lab	4
Social Science Inquiry		3
Major elective		3-4
MATH 125	Precalculus	4
Free elective/minor		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>17-18</b>

**Spring**

EGEO 272	Introduction to Georeports/Lab	1
COMM 200	Civil Discourse: Theory & Practice	3
Humanities Inquiry		3
Thread course		3
Free elective/minor		3
<b>Hours</b>		<b>13</b>

**Third Year****Fall**

GES 205	Cultural Geography	3
Major elective		3-4
Thread course		3
Free elective/minor		3
Free elective/minor		3
<b>Hours</b>		<b>15-16</b>

**Spring**

GES 325	Introduction to Geographic Information Science	3
GES 444	World Environmental Cultures	3
GES 324	Environmental Law and Policy	3
Thread course		3
Major elective		3-4
<b>Hours</b>		<b>15-16</b>

**Fourth Year****Fall**

Major elective		3-4
Major elective		3-4
Thread course		3
Free elective/minor		3
<b>Hours</b>		<b>12-14</b>

**Spring**

Major elective (if needed)		0-3
Free elective/minor		3
Free elective/minor		3
Free elective/minor		3
Free elective/minor		9
<b>Hours</b>		<b>18-21</b>
<b>Total Hours**</b>		<b>120-128</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

Major Code: 6 35

Concentration Code: PX

Revised: 11.16.2020

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

## Environmental Geoscience, Bachelor of Science (BS) - Concentration in Environmental Science

Environmental science is the integration of scientific knowledge from many disciplines in order to understand the interrelationships between human activities and the environment. Environmental science majors are exposed to the general principles of biology, chemistry, geology, geography, meteorology, and physics. Thus, it is not a focus on one of these disciplines, but involves all of them and their interaction within environmental systems.

Environmental science majors could enter several general fields:

- Industry and Consulting, monitoring and investigating the contamination of the air, land and water. Responsibilities could range from working to reduce potential environmental contamination in an industrial setting, to remediating contamination that resulted from past disposal practices.
- Local, State, or Federal Environmental Agencies, working to monitor, enforce, and develop environmental policy and regulations.
- Environmental Research, working to understand and solve environmental problems. Students would continue their education in a graduate program focusing on an area of interest to them.

The program is rich in laboratory and field experiences that support our lecture classes. Students gain important practical experience working in the field studying environmental systems and problems. In addition, students are required to complete an approved internship or research project. We train our students not only with a liberal arts education and a broad-based scientific background, but with the skills that will enable them to succeed in a competitive work force. The department encourages undergraduate student research. Opportunities abound for students to work directly with the faculty on independent research projects.

ENVS 450 or ENVS 480 must be completed during the summer after your Junior or Senior year.

## Program Learning Outcomes

### Environmental Geoscience, BS

- **Outcome 1 (EGEO):** Each graduate shall develop general knowledge and understanding of the composition, history, and structure of the planet, and of the physical, chemical, and biological processes involved in the interactions between the geosphere, hydrosphere, atmosphere, and biosphere.

- Each graduate will demonstrate an understanding of plate tectonic theory and be able to describe how it operates
- Each graduate will demonstrate an understanding of the geologic time scale and the timing of major events in Earth history
- Each graduate will demonstrate the ability to characterize and identify important rocks and minerals, and to interpret the processes by which they formed
- Each graduate will demonstrate an understanding of the history, causes, and effects of global climate change
- Each graduate will demonstrate an understanding of evolutionary theory and its evidence in the fossil record
- Each graduate will demonstrate an understanding of the internal structure of Earth
- Each graduate will be able to explain the fundamental principles of the hydrologic cycle

## Geology, Geology, and the Environment, Overall

- **Outcome 1:** Each graduate will develop strong written and oral communication skills, demonstrate the ability to work in a collaborative environment, and exhibit professional attitudes and behavior.
  - Each graduate will deliver oral presentations, demonstrating the ability to effectively communicate discipline-specific concepts
  - Each graduate will write scholarly papers using acceptable format and organization with proper citations to appropriate literature.
  - Each graduate will actively participate in collaborative projects and in academic field trips
  - Each graduate will demonstrate professionalism and integrity in his/her academic conduct
  - Each graduate shall develop the ability to respect and integrate diverse worldviews in problem-solving frameworks
- **Outcome 2:** Each graduate shall possess and apply critical thinking and problem solving skills.
  - Each graduate will demonstrate the ability to develop valid research questions and hypotheses
  - Each graduate will demonstrate the ability to apply proper techniques for data acquisition and interpretation in a problem-solving context
  - Each graduate will demonstrate the ability to solve open-ended problems using scientific methodology
  - Each graduate will develop the ability to make informed, scientifically-based decisions regarding environmental issues
- **Outcome 3:** Each graduate shall develop skills in quantitative, qualitative, technological, laboratory, and field procedures.
  - Each graduate will learn and employ accepted laboratory and field techniques, protocols, and safety procedures
  - Each graduate will learn to read, construct, and comprehend thematic maps and derive perspective output from a map
  - Each graduate will demonstrate the ability to apply knowledge, concepts and techniques from complementary disciplines to solve problems

## Related Links

[Environmental Geoscience - Environmental Science, BS Program Page](#)

[Geography, Geology, and the Environment Department Page](#)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	60
	Natural Science and Math College-Wide Requirements	12
	Electives	15

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 225	Calculus I	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab <sup>2</sup>	4
<i>Physical Science Inquiry</i>		
PHYS 216	University Physics 1 with Lab <sup>2</sup>	4
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>3</sup>		12
<b>Total Hours</b>		<b>45</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Course counts for 50% of Major requirements and Major GPA

- <sup>3</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Environmental Geoscience Core</b>		
EGEO 131	Oceanography	3
EGEO 201	Earth Materials and Processes/Lab <sup>2</sup>	4
EGEO 202	Earth History/Lab <sup>2</sup>	4
EGEO 203	Quantitative Methods <sup>2</sup>	3
EGEO 272	Introduction to Georeports/Lab <sup>2</sup>	1
Subtotal		15
<b>Environmental Science Core Requirements</b>		
EGEO 121	Meteorology/Lab <sup>1</sup>	4
EGEO 360	Introduction to Hydrology/Lab <sup>2</sup>	3
EGEO 451	Geochemistry/Lab <sup>2</sup>	4
BIOL 104		
BIOL 401	Ecology with Lab <sup>2</sup>	3
CHEM 200	Fundamentals of Organic Chemistry	3

or CHEM 201	Organic Chemistry I	
GES 324	Environmental Law and Policy <sup>2</sup>	3
GES 355	Earth's Changing Climate	3
Subtotal		23
<b>Electives - Environmental Science</b>		
18 credits required		18
ENVS 450	Environmental Science Internship (Optional)	0-3
<i>Atmosphere</i>		
EGEO 340	Air Pollution Meteorology	
ENVS 311	Environmental Monitoring and Sampling	
ENVS 480	Environmental Systems Analysis	
GES 356	Earth's Changing Climate Laboratory	
CHEM 340	Air Quality Assessment	
<i>Hydrosphere/Lithosphere</i>		
EGEO 327	Structural Geology	
EGEO 341	Geomorphology/Lab	
EGEO 342	Glacial Geology/Lab	
EGEO 362	Stratigraphy/Lab	
EGEO 460	Hydrogeology	
CHEM 370	Water Quality Assessment	
MARS XXX	Marine Science Summer Course	
<i>Biosphere</i>		
BIOL 305	Wetlands and Aquatic Plants/Lab	
BIOL 306	Freshwater Biomonitoring/Lab	
BIOL 357	Environmental Microbiology with Lab	
<i>Geotechniques</i>		
EGEO 469	Field Investigations in the Geosciences	
or GES 469	Field Investigations in the Geosciences	
GES 315	Cartography I	
GES 321	Introduction to UAS for Remote Sensing and Monitoring	
GES 325	Introduction to Geographic Information Science	
GES 410	Remote Sensing	
GES 426	Environmental Modeling	
BIOL 325	Biometry with Lab	
<i>Anthroposphere</i>		
EGEO 368	Women in Science	
GES 331	Economic Geography	
GES 344	Environmental Justice	
GES 345	Population Analysis	
GES 361	Gender and the Environment	
GES 362	Applications in Sustainability	
GES 444	World Environmental Cultures	
<b>Total Hours</b>		<b>56-59</b>

<sup>1</sup> Course counts for 50% of Major requirements but not for Major GPA

<sup>2</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.



## Required Related

Code	Title	Hours
These credits DO NOT count towards the major		
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
PHYS 217	University Physics 2 with Lab	4

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
MATH 225	Calculus I	4
PHYS 216	University Physics 1 with Lab	4
<b>Total Hours</b>		<b>12</b>

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. Student-faculty research
3. Service Learning Courses
4. Internships
5. Volunteering

ENVIRONMENTAL GEOSCIENCE - BS (6124)

Concentration in Environmental Science (ENSC)

This program is effective as of Effective Fall 2020

Revised 12.06.2021

UCC 10.26.2021

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
GES 115	Introduction to Geospatial Technologies	3
EGEO 131	Oceanography	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3

ESAP 101	FIRST Seminar *	1
<b>Hours</b>		<b>13</b>

### Spring

ENGL 104	Critical Reading	3
EGEO 201	Earth Materials and Processes/Lab	4
BIOL 104		4
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
<b>Hours</b>		<b>15</b>

### Second Year

#### Fall

EGEO 202	Earth History/Lab	4
Social Science Inquiry (p. 29)		3
EGEO 121	Meteorology/Lab	4
MATH 225	Calculus I	4
Creative & Aesthetic Inquiry (p. 29)		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>18</b>

#### Spring

EGEO 203	Quantitative Methods	3
EGEO 272	Introduction to Georeports/Lab	1
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Humanities Inquiry (p. 29)		3
Major elective		4
<b>Hours</b>		<b>14</b>

### Third Year

#### Fall

EGEO 451	Geochemistry/Lab	4
EGEO 360	Introduction to Hydrology/Lab	3
CHEM 200	Fundamentals of Organic Chemistry	3
PHYS 216	University Physics 1 with Lab	4
<b>Hours</b>		<b>14</b>

#### Spring

GES 324	Environmental Law and Policy	3
PHYS 217	University Physics 2 with Lab	4
Thematic Thread Requirement (p. 29)		3
Major elective		3
Major elective		3
<b>Hours</b>		<b>16</b>

### Fourth Year

#### Fall

BIOL 401	Ecology with Lab	3
BIOL 357	Environmental Microbiology with Lab	4
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
Free elective/minor		3
<b>Hours</b>		<b>16</b>

#### Spring

BIOL 325	Biometry with Lab	3
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Major elective	3-4
Thematic Thread Requirement (p. 29)	3
Free elective/minor	3
Free elective/minor	2-3
<b>Hours</b>	<b>14-16</b>
<b>Total Hours**</b>	<b>120-122</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6124

Concentration Code: ENSC

Revised: 08.27.2021

## Environmental Geoscience, Bachelor of Science (BS) - Concentration in Geology

The environmental geoscience (BS) concentration in geology focuses on providing students with a scientific understanding of the Earth and surrounding environment. The student in geology gains an understanding of the various terrestrial processes and features (mountains, oceans, volcanoes, glaciers); the immenseness of geologic time, the history of the earth and organisms that inhabit it (fossils); the role of water, fuel, and mineral resources in the development of civilization; and the close interaction between the geologic and organic environments.

Demand for the professional geologist comes from the needs of engineering, hydrogeologic and environmental firms; geological surveys; oil, gas and mining companies; state and national parks; museums; conservation agencies; planning commissions; and teaching institutions. A student who completes a bachelor of science in geology will have the basis for entry to graduate schools or for employment as a geologist.

Candidates completing this program are eligible to sit for the two-part Association State Boards of Geology (ASBOG) examination required for a Professional Geologist license in Pennsylvania. The first examination, Fundamentals of Geology, can be taken upon graduation. The second examination, Principles and Practices of Geology, can be taken after working for five years. Regulations for licensing vary by state and you are urged to check with the licensing board in the state you will be working.

## Program Learning Outcomes

### Environmental Geoscience, BS

- **Outcome 1 (EGEO):** Each graduate shall develop general knowledge and understanding of the composition, history, and structure of the planet, and of the physical, chemical, and biological processes involved in the interactions between the geosphere, hydrosphere, atmosphere, and biosphere.

- Each graduate will demonstrate an understanding of plate tectonic theory and be able to describe how it operates
- Each graduate will demonstrate an understanding of the geologic time scale and the timing of major events in Earth history
- Each graduate will demonstrate the ability to characterize and identify important rocks and minerals, and to interpret the processes by which they formed
- Each graduate will demonstrate an understanding of the history, causes, and effects of global climate change
- Each graduate will demonstrate an understanding of evolutionary theory and its evidence in the fossil record
- Each graduate will demonstrate an understanding of the internal structure of Earth
- Each graduate will be able to explain the fundamental principles of the hydrologic cycle

## Geology, Geology, and the Environment, Overall

- **Outcome 1:** Each graduate will develop strong written and oral communication skills, demonstrate the ability to work in a collaborative environment, and exhibit professional attitudes and behavior.
  - Each graduate will deliver oral presentations, demonstrating the ability to effectively communicate discipline-specific concepts
  - Each graduate will write scholarly papers using acceptable format and organization with proper citations to appropriate literature.
  - Each graduate will actively participate in collaborative projects and in academic field trips
  - Each graduate will demonstrate professionalism and integrity in his/her academic conduct
  - Each graduate shall develop the ability to respect and integrate diverse worldviews in problem-solving frameworks
- **Outcome 2:** Each graduate shall possess and apply critical thinking and problem solving skills.
  - Each graduate will demonstrate the ability to develop valid research questions and hypotheses
  - Each graduate will demonstrate the ability to apply proper techniques for data acquisition and interpretation in a problem-solving context
  - Each graduate will demonstrate the ability to solve open-ended problems using scientific methodology
  - Each graduate will develop the ability to make informed, scientifically-based decisions regarding environmental issues
- **Outcome 3:** Each graduate shall develop skills in quantitative, qualitative, technological, laboratory, and field procedures.
  - Each graduate will learn and employ accepted laboratory and field techniques, protocols, and safety procedures
  - Each graduate will learn to read, construct, and comprehend thematic maps and derive perspective output from a map
  - Each graduate will demonstrate the ability to apply knowledge, concepts and techniques from complementary disciplines to solve problems

## Related Links

Environmental Geoscience - Geology, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/environmental-geosciences-geology/>)

Geography, Geology, and the Environment Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/geography-geology-and-the-environment/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

Curriculum Guide

GPA Requirement

Major GPA: 2.0 or higher  
Overall GPA: 2.0 or higher

Summary\*

Code	Title	Hours
Rock Studies 2 Requirements		45
Other Basic Requirements		0-3
Computer Competency		0-3
Major/Concentration Requirements		58
Natural Science and Math College-Wide Requirement		12
Electives		17

\* All undergraduate degree programs require a minimum of 120 credits.  
Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 225	Calculus I	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	4
& CHEM 111	and General Chemistry I Lab <sup>2</sup>	
<i>Physical Science Inquiry</i>		
PHYS 216	University Physics 1 with Lab <sup>2</sup>	4
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>3</sup>		12
Total Hours		45

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.
- <sup>2</sup> Course counts for 50% of Major requirements and Major GPA
- <sup>3</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
Total Hours		0-3

Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
Total Hours		0-3

DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

Major/Concentration Requirements

- 29 major credits must be taken at SRU or PASSHE
- 29 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Environmental Geoscience Core</b>		
EGEO 1XX	Any 100-level EGEO course <sup>1</sup>	3
EGEO 201	Earth Materials and Processes/Lab <sup>1</sup>	4
EGEO 202	Earth History/Lab <sup>1</sup>	4
EGEO 203	Quantitative Methods <sup>1</sup>	3
EGEO 272	Introduction to Georeports/Lab <sup>1</sup>	1
Subtotal		15
<b>Geology Core Program Requirements</b>		
EGEO 303	Paleontology/Lab <sup>1</sup>	4
EGEO 327	Structural Geology <sup>1</sup>	4
EGEO 341	Geomorphology/Lab <sup>1</sup>	3

EGEO 351	Mineralogy/Lab <sup>1</sup>	4
EGEO 352	Petrology/Lab <sup>1</sup>	4
EGEO 362	Stratigraphy/Lab <sup>1</sup>	4
Subtotal		23

**Electives**

Select nine credits from the following:		9
EGEO 271	Geotechniques: Lab <sup>1</sup>	
EGEO 323	Planetary Geology <sup>1</sup>	
EGEO 328	Plate Tectonics <sup>1</sup>	
EGEO 342	Glacial Geology/Lab <sup>1</sup>	
EGEO 358	Introduction to Geophysics/Lab <sup>1</sup>	
EGEO 360	Introduction to Hydrology/Lab <sup>1</sup>	
EGEO 448	X-ray Spectrometry <sup>1</sup>	
EGEO 451	Geochemistry/Lab <sup>1</sup>	
EGEO 453	Geotechniques: Geochemistry <sup>1</sup>	
EGEO 458	Geophysical Field Methods/Lab <sup>1</sup>	
EGEO 460	Hydrogeology <sup>1</sup>	
EGEO 469	Field Investigations in the Geosciences <sup>1</sup>	
EGEO 476	Geotechniques: Geophysics <sup>1</sup>	
EGEO 482	Senior Seminar <sup>1</sup>	
EGEO 498	Selected Topics <sup>1</sup>	
ENVS 311	Environmental Monitoring and Sampling <sup>1</sup>	
Subtotal		9

**Field Camp**

Select four credits minimum at an acceptable field station		
EGEO 399	Field Camp <sup>1</sup>	4
Subtotal		4

**Related Courses**

GES 325	Introduction to Geographic Information Science <sup>1</sup>	3
or GES 410	Remote Sensing	
MATH 230	Calculus II <sup>1</sup>	4
Subtotal		7

**Total Hours** **58**

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**Required Related Courses**

Code	Title	Hours
<b>These credits do not count towards the major</b>		
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
PHYS 217	University Physics 2 with Lab	4
<b>Total Hours</b>		<b>8</b>

**Natural Science & Math College-Wide Requirement**

Code	Title	Hours
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
MATH 225	Calculus I	4

PHYS 216	University Physics 1 with Lab	4
<b>Total Hours</b>		<b>12</b>

**Co-curricular and Experiential Learning**

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. Student-faculty research
3. Service-learning classes
4. Internships
5. Volunteering

**Important Curriculum Guide Notes**

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

ENVIRONMENTAL GEOSCIENCE - BS (6124)

Concentration in Geology (GEOL)

This program is effective as of Fall 2020

Revised 12.06.2021

UCC 10.26.2021

**Recommended Four-Year Plan**

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EGEO 131	Oceanography	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
Creative & Aesthetic Inquiry (p. 29)		3
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
EGEO 201	Earth Materials and Processes/Lab	4
Social Science Inquiry (p. 29)		3
MATH 125	Precalculus	4
Elective		3
<b>Hours</b>		<b>17</b>

**Second Year****Fall**

EGEO 202	Earth History/Lab	4
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4

MATH 225	Calculus I	4
Thematic Thread Requirement (p. 29)		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
MATH 230	Calculus II	4
EGEO 203	Quantitative Methods	3
EGEO 272	Introduction to Georeports/Lab	1
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
EGEO 360	Introduction to Hydrology/Lab	3
EGEO 362	Stratigraphy/Lab	4
PHYS 211	General Physics I with Lab	4
Thematic Thread Requirement (p. 29)		3
Major Elective		3
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
EGEO 303	Paleontology/Lab	4
EGEO 341	Geomorphology/Lab	3
PHYS 213	General Physics III/ Lab	4
Thematic Thread Requirement (Upper Level) (p. 29)		3
Major elective		3
<b>Hours</b>		<b>17</b>
<b>Fourth Year</b>		
<b>Fall</b>		
GES 325	Introduction to Geographic Information Science	3
EGEO 351	Mineralogy/Lab	4
EGEO 327	Structural Geology	4
Major Elective		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
GES 410	Remote Sensing	3
EGEO 352	Petrology/Lab	4
Thematic Thread Requirement (p. 29)		3
Major elective		3
Field Camp (summer)		0-4
<b>Hours</b>		<b>13-17</b>
<b>Total Hours**</b>		<b>127-131</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

Major Code: 6124  
Concentration: GEOL  
Revised: 08.27.2021

## Environmental Science, Minor

Environmental science is the integration of scientific knowledge from many disciplines in order to understand the interrelationships between human activities and the environment. Environmental science minors are exposed to the general principles of biology, chemistry, geology, geography, meteorology, and physics. Students learn how the interactions of all of these processes contribute to the operation of our earth system. This knowledge can prepare students for careers in water and air quality management, nature conservation, or planning for climate change.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Environmental Science, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/environmental-geosciences-environmental-science/>)

Geography, Geology, and the Environment Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/geography-geology-and-the-environment/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Core Courses</b>		
EGEO 201	Earth Materials and Processes/Lab	4
EGEO 202	Earth History/Lab	4
EGEO 360	Introduction to Hydrology/Lab	3
GES 355	Earth's Changing Climate	3
Subtotal		14
<b>Electives</b>		
Select six to eight credits from the list below		6-8
Electives (p. 461)		
<b>Total Hours</b>		<b>20-22</b>



- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Electives

Code	Title	Hours
BIOL 305	Wetlands and Aquatic Plants/Lab	3
BIOL 306	Freshwater Biomonitoring/Lab	3
BIOL 357	Environmental Microbiology with Lab	4
BIOL 401	Ecology with Lab	3
CHEM 340	Air Quality Assessment	4
CHEM 370	Water Quality Assessment	4
EGEO 327	Structural Geology	4
EGEO 340	Air Pollution Meteorology	3
EGEO 341	Geomorphology/Lab	3
EGEO 362	Stratigraphy/Lab	4
EGEO 451	Geochemistry/Lab	4
EGEO 460	Hydrogeology	3
GES 315	Cartography I	3
GES 321	Introduction to UAS for Remote Sensing and Monitoring	3
GES 324	Environmental Law and Policy	3
GES 325	Introduction to Geographic Information Science	3
GES 344	Environmental Justice	3
GES 362	Applications in Sustainability	3
GES 410	Remote Sensing	3
GES 469	Field Investigations in the Geosciences	3
or EGEO 469	Field Investigations in the Geosciences	

- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN ENVIRONMENTAL SCIENCE (26A)

This program is effective as of Fall 2020.

Revised 03.12.2021

UCC 04.21.20

## Environmental Studies, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Environmental Studies, Minor Program Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/geography-geology-and-the-environment/programs/>)

Geography, Geology, and the Environment Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/geography-geology-and-the-environment/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Minor GPA: 2.0 or higher

### MINOR REQUIREMENTS

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Environment</b>		<b>3-4</b>
GES 135	Introduction to Environmental Problems	
GES 150	The Natural Environment	
EGEO 1XX	Any EGEO 100-level course	
<b>Planning</b>		<b>3</b>
GES 215	Planning for Sustainable Communities	
GES 331	Economic Geography	
<b>Community</b>		<b>3</b>
GES 205	Cultural Geography	
GES 344	Environmental Justice	
GES 362	Applications in Sustainability	
<b>Techniques</b>		<b>3</b>
GES 220	General Methods of Fieldwork	
GES 325	Introduction to Geographic Information Science	
GES 410	Remote Sensing	
<b>Upper Level Geography Electives</b>		<b>6</b>
GES 3XX/4XX	Any GES 300/400 level courses	
<b>Total Hours</b>		<b>18-19</b>

- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information*

on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN ENVIRONMENTAL STUDIES (32D)

This program is effective as of Summer 2022

Revised 03.31.2022

UCC 10.02.2021

## Geographic Information Science, Certificate

The certificate is specifically designed to provide specialized skills to individuals who currently work with spatial data in their chosen field or would like to leverage geospatial data in future employment. The curriculum is designed to support the increasing importance of geospatial data and analysis across diverse disciplines including geography, biological and environmental sciences, business and logistics, resource management and geosciences, planning and conservation.

The curriculum consists of twelve credits that can be completed in two semesters of coursework. The scope of coursework is designed to support individuals already familiar with basic computer concepts and descriptive statistics principles.

To access Certificate Requirements, please view the Curriculum Guide tab.

### Related Links

Geographic Information Science, Certificate Program Page (<https://www.sru.edu/academics/certificates/geographic-information-science-certificate/>)

Geography, Geology, and the Environment Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/geography-geology-and-the-environment/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

### Curriculum Guide

#### GPA Requirement

Certificate GPA: 2.0 or higher

#### Certificate Requirements

Code	Title	Hours
<b>Required Courses</b>		
CPSC 130	Introduction to Computing and Programming	3
GES 315	Cartography I	3
GES 325	Introduction to Geographic Information Science	3
<b>Select 2 classes from the following:</b>		<b>6</b>
GES 410	Remote Sensing	
GES 415	Cartography II	
GES 425	Advanced Geographic Information Systems	

GES 426

Environmental Modeling

**Total Hours**

**15**

- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

CERTIFICATE IN GEOGRAPHIC INFORMATION SCIENCE (6130)

This program is effective as of Summer 2018.

Revised 11.09.2021

## Geographic Information Technology, Minor

The Geographic Information Technology minor is designed to prepare students for employment in technical occupations and planning by becoming proficient in the fast growing field of geographic information technology. This program emphasizes the collection, analysis, and representation of earth data at scales ranging from the local to the global. Opportunities abound for students to engage in fieldwork, internships, and in the production of research in our department. If you enjoy learning about the Earth and its peoples and landscapes, either in your back yard or far away, please consider the opportunities our program provides. Representative employment areas for our graduates include environmental consulting, pollution remediation, environmental monitoring, environmental law or public policy, resource management, geographic information systems analysis, nonprofit environmental organizations, and planning.

To access Minor Requirements, please view the Curriculum Guide tab.

### Related Links

Geographic Information Technology, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/geographic-information-technology-minor/>)

Geography, Geology, and the Environment Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/geography-geology-and-the-environment/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

### Curriculum Guide

#### GPA Requirement

Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Courses</b>		
GES 220	General Methods of Fieldwork	3
GES 315	Cartography I	3
GES 325	Introduction to Geographic Information Science	3
GES 410	Remote Sensing	3
GES 415	Cartography II	3
GES 425	Advanced Geographic Information Systems	3
GES 450	Internship	3
<b>Total Hours</b>		<b>21</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN GEOGRAPHIC INFORMATION TECHNOLOGY (32C)

This program is effective as of Fall 2003.

Revised 8-2019

## Geography, Bachelor of Science (BS) - Concentration in Applied Geographic Technology

Students in the Applied Geographic Technology program study the links between human beings and their environment as well as the links between one area of the earth's surface with another. This program is designed to prepare students for employment in technical occupations, planning, or postgraduate studies. The applied geographic technology student investigates the geographic study of environmental, economic, cultural, and political processes and becomes proficient in the fast growing field of geographic information technology. This program emphasizes the collection, analysis, and representation of earth data at scales ranging from the local to the global. Opportunities abound for students to engage in fieldwork, internships, and in the production of research in our department. If you enjoy learning about the Earth and its peoples and landscapes, either in your back yard or far away, please consider the opportunities our program provides.

The Applied Geographic Technology program provides students with a base in liberal arts skills (critical thinking, writing, and speaking) and in analytical skills such as data collection in the field, in the library, and on the computer; the use of global positioning systems; and the use of mapping, spreadsheet, and database software. Many of our students have found work that allows them to address important environmental and social issues in the private or public sector. Representative employment areas for our graduates include environmental consulting, pollution remediation, environmental monitoring, environmental law or public policy, resource management, geographic information systems analysis, nonprofit environmental organizations, and planning.

## Program Learning Outcomes Geography, BS

- **Outcome 1 (GES):** Each graduate shall develop general knowledge and understanding of the concepts of location, place, human environment interactions, movement, and region.
  - Each graduate will demonstrate an understanding of physical features and patterns of the physical environment
  - Each graduate will demonstrate an understanding of features and patterns of the human environment
  - Each graduate will demonstrate an understanding of concepts such as absolute and relative location, proximity, separation, direction, region, hierarchy, density, and dispersion, and methods that are used to describe and analyze spatial patterns
  - Each graduate will demonstrate an understanding of absolute location systems such as latitude-longitude and alpha-numeric grids
  - Each graduate will demonstrate an understanding of major spatial features and patterns in the natural environment such as those relating to climate, oceans, soils, landforms, and vegetation
  - Each graduate will demonstrate an understanding of the major processes, such as evolution, atmospheric circulation, weathering and erosion, ocean currents, plate tectonics, and volcanism that shape patterns in the natural environment.
  - Each graduate will demonstrate an understanding of the major spatial features and patterns in the cultural environment such as language, religion, and agriculture and economic, political, and demographic regions
  - Each graduate will demonstrate an understanding of the major processes such as settlement, migration, trade, technological development, diffusion, and landscape transformation that shape cultural patterns

## Geology, Geology, and the Environment, Overall

- **Outcome 1:** Each graduate will develop strong written and oral communication skills, demonstrate the ability to work in a collaborative environment, and exhibit professional attitudes and behavior.
  - Each graduate will deliver oral presentations, demonstrating the ability to effectively communicate discipline-specific concepts
  - Each graduate will write scholarly papers using acceptable format and organization with proper citations to appropriate literature.
  - Each graduate will actively participate in collaborative projects and in academic field trips
  - Each graduate will demonstrate professionalism and integrity in his/her academic conduct
  - Each graduate shall develop the ability to respect and integrate diverse worldviews in problem-solving frameworks

- **Outcome 2:** Each graduate shall possess and apply critical thinking and problem solving skills.
  - Each graduate will demonstrate the ability to develop valid research questions and hypotheses
  - Each graduate will demonstrate the ability to apply proper techniques for data acquisition and interpretation in a problem-solving context
  - Each graduate will demonstrate the ability to solve open-ended problems using scientific methodology
  - Each graduate will develop the ability to make informed, scientifically-based decisions regarding environmental issues
- **Outcome 3:** Each graduate shall develop skills in quantitative, qualitative, technological, laboratory, and field procedures.
  - Each graduate will learn and employ accepted laboratory and field techniques, protocols, and safety procedures
  - Each graduate will learn to read, construct, and comprehend thematic maps and derive perspective output from a map
  - Each graduate will demonstrate the ability to apply knowledge, concepts and techniques from complementary disciplines to solve problems

## Related Links

Geography - Applied Geographic Technology, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/geography-applied-geographic-technology/>)

Geography, Geology, and the Environment Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/geography-geology-and-the-environment/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42-44
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	53-55
	Electives	25

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
	Select one of the following:	3

COMM 200	Civil Discourse: Theory & Practice
PHIL 110	Ethics and Civil Discourse
POLS 235	Civil Discourse and Democracy
Subtotal	15
<b>Integrated Inquiry</b>	
<i>Creative and Aesthetic Inquiry</i>	
Select 3 Credits (p. 29)	3
<i>Humanities Inquiry</i>	
Select 3 Credits (p. 29)	3
<i>Social Science Inquiry</i>	
Select 3 Credits (p. 29)	3
<i>Natural Sciences Inquiry</i>	
Select one of the following:	3-4
SCI 101	Science of Life
CHEM 1xx	100 Level Chemistry & Lab
BIOL 1XX	100 Level Biology & Lab
<i>Physical Sciences Inquiry</i>	
Select one of the following:	3-4
SCI 102	Understanding the Physical World
EGEO 1XX	100 Level Environmental Geoscience & Lab
Subtotal	15-17
<b>Thematic Thread</b>	
Select 12 Credits (p. 29) <sup>2</sup>	12
<b>Total Hours</b>	<b>42-44</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	

PE 202

Technology for Wellness

**Total Hours****0-3****DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT**

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

**Major/Concentration Requirements**

- 27 major credits must be taken at SRU or PASSHE
- 27 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Basic Core</b>		
GES 150	The Natural Environment <sup>1</sup>	3
GES 205	Cultural Geography <sup>1</sup>	3
GES 315	Cartography I <sup>1</sup>	3
GES 331	Economic Geography <sup>1</sup>	3
Subtotal		12
<b>Techniques Core</b>		
GES 115	Introduction to Geospatial Technologies <sup>1</sup>	3
GES 220	General Methods of Fieldwork <sup>1</sup>	3
GES 325	Introduction to Geographic Information Science <sup>1</sup>	3
EGEO 272	Introduction to Georeports/Lab <sup>1</sup>	1
Subtotal		10
<b>Applied Geographic Technology Core</b>		
GES 345	Population Analysis <sup>1</sup>	3
GES 410	Remote Sensing <sup>1</sup>	3
GES 415	Cartography II <sup>1</sup>	3
GES 425	Advanced Geographic Information Systems <sup>1</sup>	3
GES 426	Environmental Modeling <sup>1</sup>	3
Subtotal		15
<b>Other Required Technology Core</b>		
CPSC 130	Introduction to Computing and Programming	3
CPSC 146	Programming Principles	3
Subtotal		6
<b>Capstone Experience</b>		
Select one of the following:		3
GES 450	Internship <sup>1</sup>	
GES 489	Applied Geospatial Technologies <sup>1</sup>	
GES 490	Independent Study <sup>1</sup>	
Subtotal		3
<b>Special Interest Area</b>		
Select four courses from special interest area <sup>2</sup>		12-14
<b>Total Hours</b>		<b>58-60</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> Example: geography, geology, economics, biology, criminal, political science, marketing, communication, history, parks and recreation, public health and so on under consultation with student's Academic Adviser.

**Note:** at least four courses must be 300 level or above.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**Co-curricular and Experiential Learning**

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. Student-faculty research
3. Service-learning classes
4. Internships
5. Volunteering

GEOGRAPHY - BS (6142)

Concentration in Applied Geographic Technology (AGET)

This program is effective as of Fall 2019.

Revised 8-2019

UCC 11/27/2018

**Important Curriculum Guide Notes**

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

**Recommended Four-Year Plan**

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
GES 150	The Natural Environment	3
GES 115	Introduction to Geospatial Technologies	3
EGEO 131 or SCI 102	Oceanography or Understanding the Physical World	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
SCI 101	Science of Life	3
CPSC 130	Introduction to Computing and Programming	3



Creative & Aesthetic Inquiry (p. 29)	3
Free elective/minor	3
<b>Hours</b>	<b>15</b>

**Second Year****Fall**

GES 220	General Methods of Fieldwork	3
CPSC 146	Programming Principles	3
STAT 152	Elementary Statistics I	3
Social Science Inquiry (p. 29)		3
Thematic Thread Requirement (p. 29)		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>

**Spring**

EGEO 272	Introduction to Georeports/Lab	1
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Humanities Inquiry (p. 29)		3
Thematic Thread Requirement (p. 29)		3
Free elective/minor		3
<b>Hours</b>		<b>13</b>

**Third Year****Fall**

GES 315	Cartography I	3
GES 325	Introduction to Geographic Information Science	3
GES 205	Cultural Geography	3
Free elective/minor		3
Free elective/minor		3
<b>Hours</b>		<b>15</b>

**Spring**

GES 415	Cartography II	3
GES 426	Environmental Modeling	3
Major elective		3
Major elective		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>

**Fourth Year****Fall**

GES 410	Remote Sensing	3
Major Elective		3
Major Elective		3
Thematic Thread Requirement (p. 29)		3
Free elective/minor		3
<b>Hours</b>		<b>15</b>

**Spring**

Major elective		3
GES 331	Economic Geography	3
GES 345	Population Analysis	3
GES 450	Internship	3

Free elective/minor	3
<b>Hours</b>	<b>15</b>
<b>Total Hours**</b>	<b>119</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6142

Concentration Code: AGET

Revised: 08.27.2015

## Geography, Bachelor of Science (BS) - Concentration in Environmental Studies & Sustainability

Students in the environmental studies program study the links between humans and their environment. This program takes an interdisciplinary approach and integrates knowledge from the social and natural sciences in the study of environmental issues. An important goal of the program is for students to understand the relationships that exist between social, behavioral, and environmental systems. We emphasize the collection, analysis, and representation of earth data at scales ranging from the local to the global. Toward the end of their studies, students identify a research problem, gather and analyze data, and prepare a formal paper and presentation on their topic. Opportunities abound for students to engage in fieldwork, internships, and in the production of research in our department.

The environmental studies program provides students with a base in liberal arts skills (critical thinking, writing, and speaking) and in analytical skills such as data collection in the field, in the library, and on the computer; the use of global positioning systems; the use of mapping, spreadsheet, and database software. Many of our students have found work that allows them to address important environmental and social issues in the private or public sector. Representative employment areas for our graduates include environmental consulting, pollution remediation, environmental law or public policy, outdoor education, resource management, geographic information systems analysis, nonprofit environmental organizations, and planning.

## Program Learning Outcomes Geography, BS

- **Outcome 1 (GES):** Each graduate shall develop general knowledge and understanding of the concepts of location, place, human environment interactions, movement, and region.
  - Each graduate will demonstrate an understanding of physical features and patterns of the physical environment
  - Each graduate will demonstrate an understanding of features and patterns of the human environment

- Each graduate will demonstrate an understanding of concepts such as absolute and relative location, proximity, separation, direction, region, hierarchy, density, and dispersion, and methods that are used to describe and analyze spatial patterns
- Each graduate will demonstrate an understanding of absolute location systems such as latitude-longitude and alpha-numeric grids
- Each graduate will demonstrate an understanding of major spatial features and patterns in the natural environment such as those relating to climate, oceans, soils, landforms, and vegetation
- Each graduate will demonstrate an understanding of the major processes, such as evolution, atmospheric circulation, weathering and erosion, ocean currents, plate tectonics, and volcanism that shape patterns in the natural environment.
- Each graduate will demonstrate an understanding of the major spatial features and patterns in the cultural environment such as language, religion, and agriculture and economic, political, and demographic regions
- Each graduate will demonstrate an understanding of the major processes such as settlement, migration, trade, technological development, diffusion, and landscape transformation that shape cultural patterns

## Geology, Geology, and the Environment, Overall

- **Outcome 1:** Each graduate will develop strong written and oral communication skills, demonstrate the ability to work in a collaborative environment, and exhibit professional attitudes and behavior.
  - Each graduate will deliver oral presentations, demonstrating the ability to effectively communicate discipline-specific concepts
  - Each graduate will write scholarly papers using acceptable format and organization with proper citations to appropriate literature.
  - Each graduate will actively participate in collaborative projects and in academic field trips
  - Each graduate will demonstrate professionalism and integrity in his/her academic conduct
  - Each graduate shall develop the ability to respect and integrate diverse worldviews in problem-solving frameworks
- **Outcome 2:** Each graduate shall possess and apply critical thinking and problem solving skills.
  - Each graduate will demonstrate the ability to develop valid research questions and hypotheses
  - Each graduate will demonstrate the ability to apply proper techniques for data acquisition and interpretation in a problem-solving context
  - Each graduate will demonstrate the ability to solve open-ended problems using scientific methodology
  - Each graduate will develop the ability to make informed, scientifically-based decisions regarding environmental issues
- **Outcome 3:** Each graduate shall develop skills in quantitative, qualitative, technological, laboratory, and field procedures.
  - Each graduate will learn and employ accepted laboratory and field techniques, protocols, and safety procedures
  - Each graduate will learn to read, construct, and comprehend thematic maps and derive perspective output from a map
  - Each graduate will demonstrate the ability to apply knowledge, concepts and techniques from complementary disciplines to solve problems

## Related Links

Geography - Environmental Studies and Sustainability, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/geography-environmental-studies-and-sustainability/>)

Geography, Geology, and the Environment Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/geography-geology-and-the-environment/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42-44
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	56-58
	Electives	22

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
Select one of the following:		3-4
SCI 101	Science of Life	
100 Level Chemistry & Lab (CHEM)		
100 Level Biology & Lab (BIOL)		
<i>Physical Sciences Inquiry</i>		
Select one of the following:		3-4

SCI 102	Understanding the Physical World
100 Level Environmental Geoscience & Lab (EGEO)	
Subtotal	15-17
<b>Thematic Thread</b>	
Select 12 Credits (p. 29) <sup>2</sup>	12
<b>Total Hours</b>	<b>42-44</b>

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.
- <sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

Major Requirements

• 28 major credits must be taken at SRU or PASSHE		
• 28 major credits must be taken at the 300 level or above		
Code	Title	Hours
<b>Core</b>		
GES 150	The Natural Environment <sup>1</sup>	3
GES 205	Cultural Geography <sup>1</sup>	3
GES 315	Cartography I <sup>1</sup>	3
GES 331	Economic Geography <sup>1</sup>	3

Subtotal		12
<b>Techniques Core</b>		
GES 115	Introduction to Geospatial Technologies <sup>1</sup>	3
GES 220	General Methods of Fieldwork <sup>1</sup>	3
GES 325	Introduction to Geographic Information Science <sup>1</sup>	3
EGEO 272	Introduction to Georeports/Lab <sup>1</sup>	1
Subtotal		10
<b>Environmental Studies Core</b>		
<i>Introductory Course</i>		
Select one of the following:		3
Any 100 level BIOL course <sup>2</sup>		
Any 100 level EGEO course <sup>2</sup>		
GES 135	Introduction to Environmental Problems <sup>1</sup>	
Subtotal		3
<i>Additional Environmental Studies Core Courses</i>		
GES 235	Conservation <sup>1</sup>	3
GES 324	Environmental Law and Policy <sup>1</sup>	3
GES 362	Applications in Sustainability <sup>1</sup>	3
GES 344	Environmental Justice <sup>1</sup>	3
or PHIL 324	Environmental Ethics	
Subtotal		12
<b>Capstone Experience</b>		
GES 444	World Environmental Cultures <sup>1</sup>	3
or GES 469	Field Investigations in the Geosciences	
Subtotal		3
<b>A critical understanding of Community through 40 hours of Service Learning</b>		
Service Learning		
<b>Electives</b>		
Select at least one course from each of the following blocks below, at least five courses must be 300 level or above:		16-18
Environment (p. 468)		
Planning (p. 469)		
Community (p. 469)		
Subtotal		16-18
<b>Total Hours</b>		<b>56-58</b>

- <sup>1</sup> Course counts for 50% of Major requirements and Major GPA
- <sup>2</sup> Course counts for 50% of Major requirements but not for Major GPA
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

Environment

Code	Title	Hours
BIOL 104	<sup>1</sup>	4
BIOL 105	Environmental Biology <sup>1</sup>	3
BIOL 120	Plants and Society <sup>1</sup>	3
BIOL 305	Wetlands and Aquatic Plants/Lab <sup>1</sup>	3
BIOL 306	Freshwater Biomonitoring/Lab <sup>1</sup>	3
BIOL 401	Ecology with Lab <sup>1</sup>	3
EGEO 121	Meteorology/Lab <sup>1</sup>	4
EGEO 131	Oceanography <sup>1</sup>	3

Any EGEO 300/400 level course <sup>2</sup>	3
ENGL 410 Literature of the Environment <sup>1</sup>	3
GES 321 Introduction to UAS for Remote Sensing and Monitoring	3
GES 355 Earth's Changing Climate <sup>1</sup>	3
GES 356 Earth's Changing Climate Laboratory <sup>1</sup>	1
GES 426 Environmental Modeling <sup>1</sup>	3
PCRM 348 Natural History of Ecosystems I <sup>1</sup>	3
PCRM 349 Natural History of Ecosystems II <sup>1</sup>	3

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> Course counts for 50% of Major requirements but not for Major GPA

## Planning

Code	Title	Hours
ECON 315	Economics of Sustainable Development <sup>1</sup>	3
GES 215	Planning for Sustainable Communities <sup>1</sup>	3
GES 345	Population Analysis <sup>1</sup>	3
GES 363	Energy and Society <sup>1</sup>	3
GES 410	Remote Sensing <sup>1</sup>	3
GES 415	Cartography II <sup>1</sup>	3
GES 425	Advanced Geographic Information Systems <sup>1</sup>	3
HEMT 210	Contemporary Travel and Tourism <sup>1</sup>	3
HEMT 314	Sustainable Planning for Tourism <sup>1</sup>	3
PCRM 377	Cultural Resources Management <sup>1</sup>	3

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

## Community

Code	Title	Hours
GES 344	Environmental Justice <sup>1</sup>	3
GES 361	Gender and the Environment <sup>1</sup>	3
GES 375	Geography of Intolerance <sup>1</sup>	3
EGEO 368	Women in Science <sup>1</sup>	3
HLTH 311	International Health <sup>1</sup>	3
NLPA 120	Civic Engagement and Community Decision-Making <sup>1</sup>	3
NLPA 220	Introduction to Nonprofit Management <sup>1</sup>	3
INDP 304	Urban Sociology <sup>1</sup>	3
INDP 309	Health and Society <sup>1</sup>	3
NLPA 320	Community Change and Development <sup>1</sup>	3
PHIL 324	Environmental Ethics <sup>1</sup>	3

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. Student-faculty research
3. Service-learning classes

4. Internships
5. Volunteering

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

GEOGRAPHY - BS (6142)

Concentration in Environmental Studies and Sustainability (ESSU)

This program is effective as of Fall 2019.

Revised 8-2019

UCC 5.19.2019

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
GES 150	The Natural Environment	3
GES 115	Introduction to Geospatial Technologies	3
EGEO 131	Oceanography	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
SCI 101	Science of Life	3
Creative & Aesthetic Inquiry (p. 29)		3
Free elective/minor		3
Free elective/minor		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
GES 220	General Methods of Fieldwork	3
STAT 152	Elementary Statistics I	3
Humanities Inquiry (p. 29)		3
Social Science Inquiry (p. 29)		3
Free elective/minor		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
GES 205	Cultural Geography	3
GES 235	Conservation	3
EGEO 272	Introduction to Georeports/Lab	1
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	

PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>13</b>
<b>Third Year</b>		
<b>Fall</b>		
GES 315	Cartography I	3
GES 355	Earth's Changing Climate	3
GES 356	Earth's Changing Climate Laboratory	1
Thematic Thread Requirement (p. 29)		3
Free elective/minor		3
Free elective/minor		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
GES 325	Introduction to Geographic Information Science	3
GES 324	Environmental Law and Policy	3
GES 444	World Environmental Cultures	3
Major elective		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
Major Elective		3
Major Elective		3
Thematic Thread Requirement (p. 29)		3
Free elective/minor		3
Free elective/minor		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
GES 331	Economic Geography	3
GES 344	Environmental Justice	3
GES 362	Applications in Sustainability	3
Major elective		3
Free elective/minor		3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>120</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6142

Concentration Code: ESSU

Revised: 08.27.2021

## Geography, Bachelor of Science (BS) - Concentration in Global Studies

The global studies program offers students an interdisciplinary perspective on our globalized world. Students in this program gain an understanding of the basic physical, cultural, economic, and political forces that shape our world, as well as in-depth exploration of particular places and regions of importance. Global studies majors learn to think cross-culturally about the major problems facing our world, and prepare for careers with an international focus.

The global studies program provides students with a base in liberal arts skills (critical thinking, writing, and speaking) and in analytical skills such as data collection in the field, in the library, and on the computer; the use of global positioning systems; the use of mapping, spreadsheet, and database software. Many of our students have found work that allow them to address important environmental and social issues in the private or public sector. Representative employment areas for our graduates include environmental consulting, pollution remediation, environmental law or public policy, outdoor education, resource management, geographic information systems analysis, nonprofit environmental organizations, and planning.

### Program Learning Outcomes Geography, BS

- **Outcome 1 (GES):** Each graduate shall develop general knowledge and understanding of the concepts of location, place, human environment interactions, movement, and region.
  - Each graduate will demonstrate an understanding of physical features and patterns of the physical environment
  - Each graduate will demonstrate an understanding of features and patterns of the human environment
  - Each graduate will demonstrate an understanding of concepts such as absolute and relative location, proximity, separation, direction, region, hierarchy, density, and dispersion, and methods that are used to describe and analyze spatial patterns
  - Each graduate will demonstrate an understanding of absolute location systems such as latitude-longitude and alpha-numeric grids
  - Each graduate will demonstrate an understanding of major spatial features and patterns in the natural environment such as those relating to climate, oceans, soils, landforms, and vegetation
  - Each graduate will demonstrate an understanding of the major processes, such as evolution, atmospheric circulation, weathering and erosion, ocean currents, plate tectonics, and volcanism that shape patterns in the natural environment.
  - Each graduate will demonstrate an understanding of the major spatial features and patterns in the cultural environment such as language, religion, and agriculture and economic, political, and demographic regions
  - Each graduate will demonstrate an understanding of the major processes such as settlement, migration, trade, technological development, diffusion, and landscape transformation that shape cultural patterns

### Geology, Geology, and the Environment, Overall

- **Outcome 1:** Each graduate will develop strong written and oral communication skills, demonstrate the ability to work in a



collaborative environment, and exhibit professional attitudes and behavior.

- Each graduate will deliver oral presentations, demonstrating the ability to effectively communicate discipline-specific concepts
- Each graduate will write scholarly papers using acceptable format and organization with proper citations to appropriate literature.
- Each graduate will actively participate in collaborative projects and in academic field trips
- Each graduate will demonstrate professionalism and integrity in his/her academic conduct
- Each graduate shall develop the ability to respect and integrate diverse worldviews in problem-solving frameworks
- **Outcome 2:** Each graduate shall possess and apply critical thinking and problem solving skills.
  - Each graduate will demonstrate the ability to develop valid research questions and hypotheses
  - Each graduate will demonstrate the ability to apply proper techniques for data acquisition and interpretation in a problem-solving context
  - Each graduate will demonstrate the ability to solve open-ended problems using scientific methodology
  - Each graduate will develop the ability to make informed, scientifically-based decisions regarding environmental issues
- **Outcome 3:** Each graduate shall develop skills in quantitative, qualitative, technological, laboratory, and field procedures.
  - Each graduate will learn and employ accepted laboratory and field techniques, protocols, and safety procedures
  - Each graduate will learn to read, construct, and comprehend thematic maps and derive perspective output from a map
  - Each graduate will demonstrate the ability to apply knowledge, concepts and techniques from complementary disciplines to solve problems

## Related Links

Geography - Global Studies, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/geography-global-studies/>)

Geography, Geology, and the Environment Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/geography-geology-and-the-environment/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42-44
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	50-52
	Electives	28

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
Select one of the following:		3-4
SCI 101	Science of Life	
CHEM 1XX	Any CHEM 100-Level w/ Lab	
BIOL 1XX	Any BIOL 100-Level w/ Lab	
<i>Physical Sciences Inquiry</i>		
Select one of the following:		3-4
SCI 102	Understanding the Physical World	
100 Level Environmental Geoscience & Lab (EGEO)		
EGEO 1XX	Any EGEO 100-level w/Lab	
Subtotal		15-17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42-44</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		

ESAP 110	Beginning Algebra
<b>Total Hours</b>	<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		
0-3		
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 27 major credits must be taken at SRU or PASSHE
- 27 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Core</b>		
GES 150	The Natural Environment <sup>1</sup>	3
GES 205	Cultural Geography <sup>1</sup>	3
GES 315	Cartography I <sup>1</sup>	3
GES 331	Economic Geography <sup>1</sup>	3
Subtotal		12
<b>Techniques Core</b>		
GES 115	Introduction to Geospatial Technologies <sup>1</sup>	3
GES 220	General Methods of Fieldwork <sup>1</sup>	3
GES 325	Introduction to Geographic Information Science <sup>1</sup>	3
EGEO 272	Introduction to Georeports/Lab <sup>2</sup>	1
Subtotal		10
<b>Global Studies Concentration Requirements</b>		
<i>Global Environments Core</i>		
Any 200-level Modern Languages course		3
<i>Global Perspectives</i>		
Select seven to nine credits of the following:		7-9
GES 344	Environmental Justice	
GES 355	Earth's Changing Climate	
GES 356	Earth's Changing Climate Laboratory	
GES 361	Gender and the Environment	
HLTH 311	International Health	
POLS 103	International Relations	
POLS 263	Introduction to Comparative Politics	
POLS 365	International Political Economy	
<i>Capstone Experience</i>		

Select one of the following:	3
GES 444	World Environmental Cultures <sup>1</sup>
GES 469	Field Investigations in the Geosciences
<i>Regional Studies</i>	
Select one course from three of the following areas: <sup>3</sup>	9
Americas (p. 472)	
Europe and Russia (p. 472)	
Asia (p. 473)	
Middle East, Africa, and Oceania (p. 473)	
<i>Geography Electives</i>	
Select any 300/400 level GES or EGEO course, of any additional 300/400 level courses from the Regional Studies lists	6
Subtotal	28-30
<b>Total Hours</b>	<b>50-52</b>

- <sup>1</sup> Course counts for 50% of Major requirements and Major GPA
- <sup>2</sup> Course counts for 50% of Major requirements but not for Major GPA
- <sup>3</sup> An approved International experience may substitute for the relevant regional requirement.
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Americas

Code	Title	Hours
ENGL 242	African-American Literature	3
ENGL 244	Native American Literature	3
ENGL 246	U.S. Latino/a Literatures	3
GES 201	Latin America and the Caribbean	3
HIST 323	African American History to 1876	3
HIST 324	African American History Since 1876	3
HIST 337	Native American History	3
HIST 351	Latin America to 1830	3
HIST 352	Latin America Since 1830	3
HIST 353	History of the Americas	3
INDP 322	Archaeology of the Americas	3
POLS 370	Latin American Politics and Development	3
SPAN 215	Topics in Hispanic Culture	3
SPAN 307	U.S. Latino Cultures	3
SPAN 326	The Civilization of Spanish America: Precolumbian to 19th Century	3
SPAN 328	Latin American Today	3

## Europe and Russia

Code	Title	Hours
ENGL 314	European Film	3
FREN 215	Topics in French and Francophone Culture	3
FREN 305	France through the Ages	3
GES 204	Post-Soviet Union	3
GES 308	Europe	3
HIST 305	Russia to 1855	3
HIST 306	Russia Since 1855	3
HIST 346	Rise of Imperial Britain	3

HIST 371	History of Jews	3
SPAN 305	Spain Today	3

### Asia

Code	Title	Hours
ENGL 248	Asian Literature	3
ENGL 316	Asian Film	3
GES 303	Asia	3
HIST 376	Modern Japan	3
HIST 381	East Asian Military Traditions	3
HIST 382	Modern Asian Pacific Rim	3
HIST 386	Modern China	3
INDP 310	Cultural Area Studies	3
INDP 360	Issues in Asia; Women in Asian Societies	3
JAPN 305	Japanese Popular Culture	3
JAPN 330	Samurai Culture Through Film	3
PHIL 343	Asian Philosophy	3

### Middle East, Africa, and Oceania

Code	Title	Hours
GES 307	Australia	3
GES 309	Africa	3
HIST 462	The Contemporary Middle East	3
HIST 463	Israel-History, State and Society	3
HIST 380	Egyptology	3
INDP 310	Cultural Area Studies	3

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. Student-faculty research
3. Service-learning classes
4. Internships
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## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

GEOGRAPHY - BS (6142)

Concentration in Global Studies (GLST)

This program is effective as of Summer 2022

Revised 06.10.2022

UCC 03.01.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
GES 150	The Natural Environment	3
GES 115	Introduction to Geospatial Technologies	3
EGEO 131	Oceanography	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
SCI 101	Science of Life	3
Creative & Aesthetic Inquiry (p. 29)		3
GES 105	World Regional Geography	3
Free elective/minor		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
GES 220	General Methods of Fieldwork	3
Social Science Inquiry (p. 29)		3
STAT 152	Elementary Statistics I	3
MODL 2XX	Language and Culture 200 Level	3
Free elective/minor		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EGEO 272	Introduction to Georeports/Lab	1
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Humanities Inquiry (p. 29)		3
Thematic Thread Requirement (p. 29)		3
Free elective/minor		3
<b>Hours</b>		<b>13</b>
<b>Third Year</b>		
<b>Fall</b>		
GES 205	Cultural Geography	3
GES 315	Cartography I	3
GES 355	Earth's Changing Climate	3
GES 356	Earth's Changing Climate Laboratory	1
Thematic Thread Requirement (p. 29)		3
Free elective/minor		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
GES 325	Introduction to Geographic Information Science	3
GES 344	Environmental Justice	3
Major elective		3
Thematic Thread Requirement (p. 29)		3

Free elective/minor		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
Major Elective		3
Major Elective		3
Thread course		3
Free elective/minor		3
Free elective/minor		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
GES 331	Economic Geography	3
GES 444	World Environmental Cultures	3
Free elective/minor		3
Free elective/minor		3
Free elective/minor		3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>120</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6142

Concentration Code: GLST

Revised: 08.27.2021

## Geology, Minor

The Geology minor provides students with a scientific understanding of the Earth and surrounding environment. The student in geology gains an understanding of the various terrestrial processes and features (mountains, oceans, volcanoes, glaciers); the immenseness of geologic time, the history of the earth and organisms that inhabit it (fossils); the role of water, fuel, and mineral resources in the development of civilization; and the close interaction between the geologic and organic environments. Demand for the professional geologist comes from the needs of engineering, hydrogeologic and environmental firms; geological surveys; oil, gas and mining companies; state and national parks; museums; conservation agencies; planning commissions; and teaching institutions.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Geology, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/environmental-geosciences-geology/>)

Geography, Geology, and the Environment Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/geography-geology-and-the-environment/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 9 credit hours must be upper division (an upper division course includes any 3-credit course that requires a pre-requisite)
- A minor shall be no fewer than 15 credits.

Code	Title	Hours
<b>Required Courses</b>		
EGEO 1XX	Any 100-Level EGEO Course	3
EGEO 201	Earth Materials and Processes/Lab	4
EGEO 202	Earth History/Lab	4
<b>Electives</b>		
Select at least three courses:		9-12
EGEO 303	Paleontology/Lab	
EGEO 323	Planetary Geology	
EGEO 327	Structural Geology	
EGEO 328	Plate Tectonics	
EGEO 341	Geomorphology/Lab	
EGEO 342	Glacial Geology/Lab	
EGEO 351	Mineralogy/Lab	
EGEO 352	Petrology/Lab	
EGEO 358	Introduction to Geophysics/Lab	
EGEO 362	Stratigraphy/Lab	
EGEO 458	Geophysical Field Methods/Lab	
EGEO 460	Hydrogeology	
<b>Total Hours</b>		<b>20-23</b>

- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN GEOLOGY (34A)

This program is effective as of Fall 2017.  
Revised 04.09.2020

## Geophysics, Minor

The Geophysics minor provides students with a grounding in the technical skills crucial to investigating the subsurface features of our earth. The minor emphasizes a variety of state-of-the-art techniques used by professionals in resource exploration and development in order to study what lies beneath our feet, including both ground-based approaches as well as aerial (drones) and satellite imaging.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Geophysics, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/geophysics-minor/>)

Geography, Geology, and the Environment Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/geography-geology-and-the-environment/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Geophysics Core Courses</b>		
EGEO 358	Introduction to Geophysics/Lab	3
EGEO 458	Geophysical Field Methods/Lab	3
<b>Foundation Sequence</b>		
Select one of the following sequences:		12-13
<i>Foundation – Environmental Geoscience Majors</i>		
MATH 231	Calculus III	
MATH 240	Linear Algebra and Differential Equations	
PHYS 212	General Physics II with Lab	
CPSC 146	Programming Principles	
<i>Foundation – Other (Non-EGEO) Majors</i>		
EGEO 101	Physical Geology	
EGEO 201	Earth Materials and Processes/Lab	
MATH 240	Linear Algebra and Differential Equations	
PHYS 212	General Physics II with Lab	
<b>Total Hours</b>		<b>18-19</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

Minor in Geophysics (34E)

This program is effective as of Fall 2014.

Revised 8-2019

## Meteorology, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Meteorology, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/meteorology-minor/>)

Geography, Geology, and the Environment Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/geography-geology-and-the-environment/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Minor Courses</b>		
EGEO 121	Meteorology/Lab	4
EGEO 340	Air Pollution Meteorology	3
GES 355	Earth's Changing Climate	3
GES 356	Earth's Changing Climate Laboratory	1
CPSC 140	Introduction to Programming Principles	3
MATH 230	Calculus II	4
<b>Required Elective Courses</b>		
Select two of the following:		6-7
MATH 240	Linear Algebra and Differential Equations	
CHEM 340	Air Quality Assessment	
EGEO 360	Introduction to Hydrology/Lab	
PHYS 385	Computational Physics	



ENVS 490	Independent Study
<b>Total Hours</b>	<b>24-25</b>

- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN METEOROLOGY (34B)

This program is effective as of Fall 2008

Revised 8-2019

## Sustainability, Certificate

This interdisciplinary certificate should benefit a diverse population of students who might not be introduced to such concepts through completion of their degree program. Students who obtain a Certificate in Sustainability will be better prepared to critically evaluate society's interactions with the environment and to help find ethical and equitable solutions to environmental challenges.

Students will complete one course from at least two of the three categories, and complete the capstone course, Principles of Sustainability. Only two of the four courses can be from the same academic discipline. Students must also complete 12 hours of stewardship, which may include service learning, community volunteer hours, research, or a sustainability project. The capstone course includes the stewardship requirement.

To access Certificate Requirements, please view the Curriculum Guide tab.

## Related Links

Sustainability, Certificate Program Page (<https://www.sru.edu/academics/certificates/sustainability-certificate/>)

Geography, Geology, and the Environment Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/geography-geology-and-the-environment/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Certificate GPA: 2.0 or higher

### Certificate Requirements

This interdisciplinary certificate should benefit a diverse population of students who might not be introduced to such concepts through

completion of their degree program. Students who obtain a Certificate in Sustainability will be better prepared to critically evaluate society's interactions with the environment and to help find ethical and equitable solutions to environmental challenges.

Students will complete one course from at least two of the three categories, and complete the capstone course, Principles of Sustainability. Only two of the four courses can be from the same academic discipline. Students must also complete 12 hours of stewardship, which may include service learning, community volunteer hours, research, or a sustainability project. The capstone course includes the stewardship requirement.

Code	Title	Hours
<b>Certificate Requirements</b>		
Select one course from at least two of the three categories: <sup>1</sup>		9
<i>Environmental Stewardship</i>		
BIOL 105	Environmental Biology	
BIOL 322	Conservation Biology/Lab	
BIOL 401	Ecology with Lab	
EGEO 100	Environmental Geology	
EGEO 131	Oceanography	
ENVS 440	Science, Technology and the Environment	
GES 135	Introduction to Environmental Problems	
GES 235	Conservation	
GES 355	Earth's Changing Climate	
PCRM 104	Foundations in Sustainability	
<i>Social Responsibility</i>		
ENGL 410	Literature of the Environment	
GES 215	Planning for Sustainable Communities	
GES 324	Environmental Law and Policy	
GES 344	Environmental Justice	
HIST 445	Americans and the Environment	
INDP 401	Applied Anthropology	
NLPA 120	Civic Engagement and Community Decision-Making	
NLPA 320	Community Change and Development	
NLPA 325	Social and Ethical Issues in Philanthropy and Fundraising	
PHIL 324	Environmental Ethics	
PHIL 331	Social and Political Philosophy	
<i>Economic Prosperity</i>		
ECON 315	Economics of Sustainable Development	
GES 305	Environmental Economic Geography	
HEMT 114	Sustainability in Food and Hospitality	
HEMT 210	Contemporary Travel and Tourism	
HEMT 314	Sustainable Planning for Tourism	
MGMT 370	Sustainable Entrepreneurship and Innovation	
MGMT 459	Sustainable Business Consulting	
PHIL 326	Business Ethics	
<b>Capstone Experience</b>		
GES 362	Applications in Sustainability	3
<b>Total Hours</b>		<b>12</b>

- <sup>1</sup> Only two of the four courses can be from the same academic discipline.
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

CERTIFICATE IN SUSTAINABILITY (614C)

This program is effective as of Spring 2016.

Revised 11-2019

UCC 3.26.2019

## Mathematics and Statistics

Chair	Secretary	Location	Department Phone
Dr. Richard Marchand	Liz Moyer	200 Vincent Science Center	724-738-2061

Department Web Site URL (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/mathematics-and-statistics/>)

Department Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/math-fs.pdf>)

### Faculty

#### James Anthony

Instructor  
Mathematics & Statistics  
M.A., Penn State University  
B.S., Lock Haven University

#### Jana Asher

Instructor  
Mathematics & Statistics  
Ph.D., Carnegie Mellon University  
M.S., Carnegie Mellon University  
B.A., Wellesley College

#### Joshua Ballew

Assistant Professor  
Mathematics & Statistics  
Ph.D., University of Maryland College Park  
B.A., St. Mary's College of Maryland

#### Boris Brimkov

Assistant Professor  
Mathematics & Statistics  
Ph.D., Rice University  
M.A., Rice University

B.S., State University of New York at Buffalo

#### Stephen Galloway

Instructor  
Mathematics & Statistics  
Ph.D., University of Tennessee  
M.S., University of Tennessee  
B.S., Slippery Rock University  
B.S., Grove City College

#### Amanda Goodrick

Assistant Professor  
Mathematics & Statistics  
M.S.M., Youngstown State University  
B.S., Slippery Rock University

#### Rachele Graham

Instructor  
Mathematics & Statistics  
M.S., University of Tennessee  
B.S., Lambuth University

#### Woosuk Kim

Associate Professor  
Mathematics & Statistics  
Ph.D., University of Cincinnati  
M.S., University of Cincinnati  
M.S., Texas A & M University  
B.S., Pusan National University Institution Korea

#### Richard Marchand

Professor  
Mathematics & Statistics  
Ph.D., University of Virginia  
B.S., Clarion University

#### Kirk McDermott

Assistant Professor  
Mathematics & Statistics  
Ph.D., Oregon State University  
M.S., Oregon State University  
B.A., Earlman College

#### J Lyn Miller

Assistant Professor  
Mathematics & Statistics  
Ph.D., University of Maryland  
B.S., Slippery Rock University

#### Jeffrey Musyt

Assistant Professor  
Mathematics & Statistics  
Ph.D., University of Oregon  
M.S., University of Oregon  
B.S., University of Scranton

#### Dilrukshika Singhabahu

Associate Professor  
Mathematics & Statistics  
Ph.D., University of Pittsburgh  
B.S., Slippery Rock University

#### Shukhrat Usmanov

Instructor

Mathematics & Statistics  
 Ph.D., N. Dakota State University  
 M.S., Natl University of Uzbekistan  
 B.S., Natl University of Uzbekistan

### Programs

### Majors

- Mathematics, Bachelor of Science (BS) (p. 488)
- Mathematics/Secondary School Mathematics Minor, Teacher Certification (BS) (p. 492)

### Minors

- Actuarial Science, Minor (p. 487)
- Elementary School Mathematics, Minor (p. 488)
- Mathematics, Minor (p. 491)
- Middle School Mathematics, Minor (p. 494)
- Secondary School Mathematics, Minor (p. 495)
- Statistics, Minor (p. 496)

### Courses

## MATH Courses

### MATH 113 - Mathematics as a Liberal Art

A cultural enrichment course, which introduces topics and applications from different branches of mathematics.

Prerequisites: (ACSD 110<sup>C</sup> or ESAP 110<sup>C</sup>) or minimum score of Y in 'WAIVE ACSD110 W HIGHER MATH'  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Every Term

### MATH 115 - Financial Mathematics

Methods of solving problems arising from the growth of money through simple and compound interest. Savings accounts, loans, financing, mortgages, depreciation, bonds, pensions and life insurance are included.

Prerequisites: (ACSD 110<sup>C</sup> or ESAP 110<sup>C</sup>) or minimum score of Y in 'WAIVE ACSD110 W HIGHER MATH'  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Thematic Thread(s): Transfer Thread Completion Course

### MATH 117 - Quantitative Reasoning

Quantitative reasoning is the application of basic mathematical skills to the analysis and interpretation of real-world quantitative information to draw conclusions that are relevant to people in their daily lives. In this course, students will explore various quantitative models and their interpretations in a way that emphasizes mathematical and statistical reasoning skills. Conceptual understanding will be stressed over manipulative skills. Students will learn to create sophisticated arguments supported by quantitative evidence and clearly communicate them in a variety of formats (using words, tables, graphs, mathematical equations, etc.) as appropriate. Technology, such as spreadsheets, will also be used. This course satisfies the Quantitative Reasoning requirement in the Rock Studies Program. This course is graded A, B, C, NC.

Prerequisites: (ACSD 110<sup>C</sup> or ESAP 110<sup>C</sup>) or minimum score of Y in 'WAIVE ACSD110 W HIGHER MATH'

<sup>C</sup> Requires minimum grade of C.

Credits: 3

### MATH 118 - Elementary Geometry

A survey of Euclidean geometry and related elementary geometrical concepts. This course is not appropriate for those planning to teach geometry at the secondary level, but would be an excellent choice for those who will be teaching mathematics in the elementary school.

Prerequisites: (ACSD 110<sup>C</sup> or ESAP 110<sup>C</sup>) or minimum score of Y in 'WAIVE ACSD110 W HIGHER MATH'

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment is limited to students with a program in Early Childhood Ed (PK-4), Early Childhood Educ-Int'l Ed, School Wellness Education, Health-Physical Educ Teaching, Health and Physical Education, Early Child-Spec Ed-Intl Ed, Early Child/Spec Ed(PK-4)PK-8), Sec Education-English(7-12), Sec Education-French (K-12), Mid Level-Eng&Lang Arts (4-8), Mid Level-Mathematics (4-8), Mid Level-Social Studies (4-8), Middle Level-Science (4-8), Sec Ed-Social Stud-Hist (7-12), Secondary Educ-Spanish (K-12), Music Education (K-12), Music Educ-Voice (K-12), Music Educ-Saxophone (K-12), Music Educ-Instrumental (K-12), Music Educ-Piano (K-12), Elementary School Mathematics, Middle School Mathematics or Art With Certification (K-12).

### MATH 120 - Intermediate Algebra

Linear functions, equations, inequalities, polynomials, algebra of functions, rational exponents, quadratic equations and inequalities, systems of equations.

Prerequisites: (ACSD 110<sup>C</sup> or ESAP 110<sup>C</sup>) or minimum score of Y in 'WAIVE ACSD110 W HIGHER MATH' or minimum score of 30 in 'ALEKS PPL Assessment'

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer

### MATH 122 - Finite Mathematics with Matrices

The algebra of matrices with applications in linear optimization, algebraic and graphical solutions.

Prerequisites: MATH 120<sup>D</sup> or MATH 199<sup>D</sup> or minimum score of 60 in 'ALEKS PPL Assessment'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MATH 123 - Introduction to Applied Calculus**

The course is compatible with the background and interests of students not majoring in the physical sciences or mathematics. The theorem-proof approach of differential calculus is replaced with the explanation-example approach. The course includes an introduction to exponential and logarithmic functions, limits, derivatives, maxima/minima, and Lagrange multipliers, and applications from business, economics, and finance. Problem-solving with mathematical software will also be emphasized.

Prerequisites: MATH 120<sup>D</sup> or MATH 111<sup>D</sup> or MATH 199<sup>D</sup> or MATH 125<sup>D</sup> or minimum score of 60 in 'ALEKS PPL Assessment'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MATH 125 - Precalculus**

A bridge between high school algebra and calculus involving polynomial, trigonometric, logarithmic, exponential functions, complex numbers, and the conic sections.

Prerequisites: MATH 120<sup>D</sup> or MATH 199<sup>D</sup> or minimum score of 560 in 'SAT MATH SECTION SCORE' or minimum score of 23 in 'ACT Math' or minimum score of 60 in 'ALEKS PPL Assessment'

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Fall, Spring, & Summer

**MATH 131 - Discrete Mathematics**

This course begins the study of the language and concepts needed for higher-level mathematics. Students will learn principles of logic, focusing on logical forms, truth tables, and statement calculus. Students will analyze examples of and complete calculations involving sets, relations, and functions. Students will also receive an introduction to counting techniques and recursion. This course is not a proof-based course.

Prerequisites: MATH 125<sup>D</sup> or MATH 225<sup>D</sup> or MATH 230<sup>D</sup> or minimum score of 75 in 'ALEKS PPL Assessment'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**MATH 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**MATH 180 - Introduction to Mathematical Software**

An introduction to the appropriate use of mathematical software with emphasis on problem solving. Topics will include mathematical concepts from calculus, linear algebra, and differential equations.

Prerequisite: MATH 225 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered as Needed

**MATH 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MATH 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**MATH 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MATH 210 - Mathematics for Elementary Teachers I**

This course is designed for future K-8 teachers to explore number systems (including definitions, operations, and properties of whole numbers and fractions), numeration systems, proportionality, algebraic thinking, and problem-solving. Emphasis is on conceptual understanding in addition to procedural skill.

Prerequisites: (ACSD 110<sup>D</sup> or ESAP 110<sup>D</sup>) or minimum score of Y in 'WAIVE ACSD110 W HIGHER MATH'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1 may **not** enroll.

Enrollment is limited to students with a program in Early Childhood Ed (PK-4), Early Childhood Educ-Int'l Ed, School Wellness Education, Health-Physical Educ Teaching, Health and Physical Education, Early Child/Spec Ed(PK-4)PK-8), Early Child/Spec Ed(PK-4)PK-12, Sec Education-English(7-12), Sec Education-French (K-12), Mid Level-Engl&Lang Arts (4-8), Mid Level-Mathematics (4-8), Mid Level-Social Studies (4-8), Middle Level-Science (4-8), Sec Ed-Social Stud-Hist (7-12), Secondary Educ-Spanish (K-12), Special Education (PK-12), Music Education (K-12), Music Educ-Voice (K-12), Music Educ-Saxophone (K-12), Music Educ-Instrumental (K-12), Music Educ-Piano (K-12), Elementary School Mathematics, Middle School Mathematics or Art With Certification (K-12).

**MATH 225 - Calculus I**

This course begins the study of calculus of functions of one variable. Students will study limits and continuity of real-valued functions. Students will explore the derivative as a rate of change and learn how to calculate derivatives of algebraic and transcendental functions. Applications of the derivative to various physical and other phenomena will be considered. This course also provides an introduction to Riemann integration.

Prerequisites: MATH 125<sup>C</sup> or minimum score of 75 in 'ALEKS PPL Assessment'

<sup>C</sup> Requires minimum grade of C.

Credits: 4

Term(s) Typically Offered: Offered Fall, Spring, & Summer

**MATH 230 - Calculus II**

This course continues the study of calculus of real-valued functions of one variable. Students will learn various techniques of evaluating antiderivatives and approximating definite integrals. These integrals will be used in various applications such as calculating areas and volumes, arc length, work, and solving simple first-order differential equations. Parametric and polar equations and their differential and integral calculus are also considered. Students will also investigate sequences and series, their convergence properties, and the use of power series to represent functions.

Prerequisite: MATH 225<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 4

Term(s) Typically Offered: Offered Fall, Spring, & Summer

**MATH 231 - Calculus III**

This course continues the study of calculus with the study of functions of several variables. Students will learn about the geometry of two- and three-dimensional space, vector-valued functions, and functions of several variables. Students will investigate these functions with partial derivatives and multiple integration. Vector calculus topics such as Green's, Stokes, and the Divergence Theorems will be covered. Computer software such as Mathematica will be used in problem solving in this course.

Prerequisite: MATH 230<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 4

Term(s) Typically Offered: Offered Fall & Spring Terms

**MATH 232 - Linear Algebra**

In this class, students will learn techniques for solving systems of linear equations and related matrix equations. Vectors and vector spaces will be considered along with properties relating to solving matrix equations. In particular, special care will be taken with real vector spaces and inner product spaces, and how they are used to solve problems with applications in physics and other fields. The eigenvalue/eigenvector problem will also be discussed. Students will be expected to use technology to solve problems in this class.

Prerequisite: MATH 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**MATH 235 - Foundations of Mathematical Proof**

This course provides a foundation for writing mathematical proofs. Students will work with common proof techniques such as direct proof, proof by contrapositive, proof by contradiction, and proof by induction, along with the logical bases supporting them. In developing their proof-writing skills, students will work with foundational mathematical concepts such as basic set theory, relations between sets, and functions.

Prerequisites: MATH 225<sup>C</sup> and MATH 131<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**MATH 240 - Linear Algebra and Differential Equations**

Computational aspects of matrices, determinants, systems of linear equations, vector spaces, linear dependence, Wronskian, characteristic values, elementary differential equations, separable and exact equations, linear differential equations with constant coefficients.

Prerequisite: MATH 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**MATH 280 - Theory of Interest**

A rigorous, calculus based treatment of the Theory of Interest, including simple and compound interest, annuities, bonds, yield rates, amortization schedules and sinking funds, yield curves, and practical applications. This course is intended to prepare students for the Society of Actuaries examination on the theory of interest.

Prerequisite: MATH 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**MATH 281 - Actuarial Exam Preparation I**

The purpose of this course is to prepare students for The Society of Actuaries" (SOA) first professional examination. Topics will be selected from the SOA syllabus which currently includes general probability theory, univariate and multivariate probability distributions (discrete and continuous), applications involving insurance and risk analysis, and supporting topics from Calculus.

Credits: 1

Term(s) Typically Offered: Offered as Needed

**MATH 282 - Actuarial Exam Preparation II**

The purpose of this course is to prepare students for The Society of Actuaries" (SOA) second professional examination. Topics will be selected from the SOA syllabus which currently includes time value of money, yield rates, methods of loan repayment, annuities, asset/liability management, immunization, duration, convexity, bonds, stocks, mutual funds, capital budgeting, short sales, spot and forward rates, options, derivatives, futures, and arbitrage.

Prerequisite: MATH 280<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered as Needed



**MATH 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MATH 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**MATH 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MATH 301 - Differential Equations I**

First and second order differential equations, existence and uniqueness theorems, Laplace transforms, systems of linear ordinary differential equations.

Prerequisite: MATH 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 302 - Differential Equations II**

A continuation of MATH 301. Series solutions of ordinary differential equations, non-linear systems and stability, partial differential equations.

Prerequisite: MATH 301<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 304 - Geometric Structures**

Finite and infinite axiomatic systems, including Euclidean and projective geometrics.

Prerequisite: MATH 235<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 310 - Mathematics for Elementary Teachers II**

This course is designed for future K-8 teachers to continue to explore number systems (including definitions, operations, and properties of integers, rational and real numbers), descriptive statistics, basic probability, and measurement and related geometry. Emphasis is on conceptual understanding in addition to procedural skill.

Prerequisite: MATH 210<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Early Childhood Ed (PK-4), Early Childhood Educ-Int'l Ed, School Wellness Education, Health-Physical Educ Teaching, Health and Physical Education, Early Child/Spec Ed(PK-4)PK-8), Early Child/Spec Ed(PK-4)PK-12, Sec Education-English(7-12), Sec Education-French (K-12), Mid Level-Engl&Lang Arts (4-8), Mid Level-Mathematics (4-8), Mid Level-Social Studies (4-8), Middle Level-Science (4-8), Sec Ed-Social Stud-Hist (7-12), Secondary Educ-Spanish (K-12), Special Education (PK-12), Music Education (K-12), Music Educ-Voice (K-12), Music Educ-Saxophone (K-12), Music Educ-Instrumental (K-12), Music Educ-Piano (K-12), Elementary School Mathematics, Middle School Mathematics or Art With Certification (K-12).

**MATH 311 - Deterministic Models of Operations Research**

Topics include deterministic methods in operations research. Linear programming, duality, integer programming, dynamic programming, nonlinear programming, inventory theory, transportation and assignment and network theory.

Prerequisites: MATH 231<sup>C</sup> or MATH 240<sup>C</sup> or (MATH 122<sup>C</sup> and MATH 230<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 312 - Stochastic Models of Operations Research**

Decision making under uncertainty. Probability, Markov Chains, Poisson processes, Survival Analysis, Queueing Systems, Random Walk, Branching.

Prerequisites: MATH 231<sup>C</sup> or MATH 240<sup>C</sup> or (MATH 122<sup>C</sup> and MATH 230<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 313 - Introductory Analysis I**

This course begins the rigorous mathematical study of the real numbers. Topics include cardinality of sets; sequences of real numbers; completeness of the real numbers; topology of the real line including open sets, closed sets, and compact sets; and continuous, real-valued functions. Students will be expected to communicate using mathematical proofs throughout the course.

Prerequisites: MATH 231<sup>C</sup> and MATH 235<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 314 - Introductory Analysis II**

This course continues the rigorous mathematical treatment of the real numbers that begins in MATH 313. The concepts of differentiation and Riemann integration of real-valued functions on the real line from calculus are explored and made rigorous. Additionally, series of functions are explored, including convergence (pointwise and uniform) and Taylor series. Students will be expected to communicate using mathematical proofs throughout the course.

Prerequisite: MATH 313<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 315 - Numerical Mathematics**

The mathematics of computation and approximation, interpolation, calculating the roots of equations, curve fitting linear systems, numerical differentiation and integration and error analysis.

Prerequisites: MATH 240<sup>D</sup> or MATH 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**MATH 316 - Advanced Methods of Operations Research**

Topics include Brownian motion, stationary processes, weak convergence of stochastic processes, regenerative phenomena, random walks, simulations.

Prerequisite: MATH 312<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 317 - Complex Variables**

Complex numbers, analytic functions, complex integration, convergence of sequences and series, and applications.

Prerequisite: MATH 231<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 320 - Theory of Numbers**

A study of the properties of natural numbers and number theoretic functions.

Prerequisite: MATH 235<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 325 - Abstract Algebra I**

An introduction to groups. Topics include integers mod  $n$ , cyclic groups, permutation groups, normal subgroups, isomorphisms, finite Abelian groups.

Prerequisite: MATH 235<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 326 - Abstract Algebra II**

An introduction to rings. Topics include integral domains, fields, polynomial rings.

Prerequisite: MATH 325<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 331 - Mathematical Methods of Physics**

Applications in physical science and engineering of the following: vector analysis, complex variables, Fourier and Laplace transforms, linear algebra, and some boundary value problems. Cross-linked as PHYS 331. This course may be counted as a physics course or as a mathematics course, but not both.

Prerequisites: PHYS 211<sup>D</sup> and MATH 240<sup>D</sup> and MATH 231<sup>\*D</sup> (may be taken concurrently).

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 335 - Mathematical Modeling**

A general introduction to mathematical modeling involving optimization, dynamic and probabilistic models. Specific topics selected from dimensional analysis, optimization techniques, continuous and discrete modeling, stability analysis, linearization, eigenvalue methods, qualitative analysis, Markov chains, regression models, simulation techniques, and others as time permits.

Prerequisite: MATH 231<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 403 - Elementary Topology**

Topological properties of the real line.

Prerequisites: MATH 309<sup>D</sup> and MATH 313<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 406 - Intermediate Analysis**

Selected topics.

Prerequisite: MATH 314<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 411 - Partial Differential Equations**

This course in partial differential equations has wide-ranging applications in a variety of fields such as engineering and physics. Topics include first order equations and the method of characteristics; an introduction to Fourier series; second order equations including the heat, wave, and Laplace equations; numerical methods for computing solutions; conservation laws.

Prerequisites: MATH 231<sup>C</sup> and MATH 301<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 482 - Actuarial Mathematics**

Interest rate models, including the Vasicek and Cox-Ingersoll-Ross bond price models, rational valuation of derivative securities, simulation and risk management techniques.

Prerequisites: MATH 231<sup>D</sup> and MATH 280<sup>D</sup> and (MATH 353<sup>D</sup> or STAT 353<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 484 - Life Contingencies**

An introduction to survival models, individual life insurance and life annuities including determining premiums and reserves using a stochastic approach. It will include multiple life theory, binomial models, geometric Brownian motion and simulation in option pricing. It will develop a theoretical basis of contingent payment models and the application of those models to insurance risk.

Prerequisites: MATH 231<sup>D</sup> and MATH 280<sup>D</sup> and MATH 353<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 490 - Independent Study**

Supervised study in advanced area. Prerequisites: Two 300-level mathematics courses, a 3.000 QPA in major, permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 491 - Mathematics Seminar**

Designed to broaden the students' backgrounds by investigating topics in mathematics not usually taught in the regular curriculum. Students may elect to take course up to three times.

Prerequisite: MATH 235<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## STAT Courses

**STAT 124 - Introduction to Survey Methods**

Introduction to Survey Methods: A 100 level course that introduces students to aspects of how surveys work. Students learn about the design, and interpretation of survey data. A range of survey strategies (e.g., telephone, face-to-face, mail and internet surveys) within the broader context of a research or evaluation project are introduced. Topics include formulation of research goals, developing an appropriate questionnaire design, protection of human subjects and proper conduct of research, sample size calculation and sample design, survey administration, construction of a survey report including basic data analysis techniques, and presentation of the results of a survey. Class topics are designed to convey practical knowledge of survey design.

Prerequisite: ACSD 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**STAT 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**STAT 152 - Elementary Statistics I**

This is a course about how data inform every aspect of our lives. This course focuses on what data are collected, how they are collected, how they are summarized and interpreted, and how possible error in those data is quantified and understood. In this class, we will learn about ways in which statistics are used by businesses, governmental agencies, researchers, and practitioners to understand our world. Topics covered include descriptive statistics, bivariate and multivariate data, elementary probability, random variables, normal and binomial probability distributions, Central Limit Theorem, confidence intervals, hypothesis testing, and simple linear regression.

Prerequisites: (ACSD 110<sup>C</sup> or ESAP 110<sup>C</sup>) or minimum score of Y in 'WAIVE ACSD110 W HIGHER MATH'

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**STAT 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**STAT 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**STAT 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**STAT 252 - Introduction to Statistical Modeling**

What do we mean when we talk about "statistical modeling"? How can statistical models be used to provide evidence for scientific or social theories? In this course, we begin by reviewing hypothesis testing and learn how hypothesis testing is applied in a wide variety of statistical contexts. We then move on to the workhouse of statistical modeling, linear regression, and learn the complex methods used to determine the validity of regression models. We then touch on analysis of variance models, polynomial regression, and time series. R will be used for data analysis, but no prior knowledge of R is assumed.

Prerequisites: STAT 152<sup>D</sup> and ENGL 102<sup>D</sup> and (MATH 123<sup>D</sup> or MATH 125<sup>D</sup> or MATH 225<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**STAT 254 - Nonparametric Statistics**

Statistical models in nonparametric settings. Theory and practice using techniques requiring less restrictive assumptions about the distribution of the data. Nonparametric analogues of t- and F-tests in one and two sample settings, ANOVA, regression and correlation will be discussed.

Prerequisites: MATH 125<sup>D</sup> and (MATH 153<sup>D</sup> or STAT 153<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**STAT 256 - Statistical Computing**

Statistical computing considers how data are processed and analyzed, and how statistical models are simulated, in a computational setting. The current landscape of the statistical computing community will be explored, including common statistical software, proprietary versus open-source statistical languages, and how statistical software packages are tailored for specific uses. Computationally intense statistical techniques will be discussed and programmed. At least one proprietary and one open-source statistical computing environment will be learned. Students will learn how to combine the functionality of different statistical packages to create and present a data analysis optimally. Prior experience with computer programming highly recommended.

Prerequisite: STAT 252<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**STAT 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**STAT 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**STAT 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**STAT 318 - Statistical Study Design**

There are five basic sources of data that can be used for a statistical study: observational data, experimental data, data from a survey or census, simulation data, and found data. In this course, we learn the strengths and weaknesses associated with each study type, exploring the concepts of randomization, representation, causality, weighting, estimation, and variance. Ethical issues associated with statistical studies will also be discussed. A working knowledge of spreadsheet software such as Microsoft Excel is assumed.

Prerequisite: STAT 152<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**STAT 325 - Advanced Statistical Methods**

Statistics is used in computer algorithms (machine learning) to enhance computer decision-making and prediction capabilities. This course will cover a wide variety of topics in statistical learning methods. Major statistical methods used in machine learning such as linear regression, survival analysis and others will be discussed. Additional topics include unsupervised learning and supervised techniques such as principal component analysis, nearest neighbor, random forest, support vector machines and neural networks. Simulation methods, such as the EM algorithm, Metropolis-Hasting algorithm and the Markov Chain Monte Carlo method will also be discussed.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment is limited to Graduate level students.

**STAT 350 - Applied Statistics**

A calculus-based introduction to probability and statistical applications. Discrete and continuous probability and expected value. Confidence intervals and hypothesis testing for single populations. This course is not open to students who have credit for MATH 352. This course does not count as an upper division elective mathematics course for mathematics majors.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**STAT 352 - Mathematical Statistics I**

An introduction to the mathematical foundations of probability theory including discrete and continuous probability distributions, random variables, mathematical expectation, moment generating functions.

Prerequisite: MATH 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**STAT 353 - Mathematical Statistics II**

Functions of random variables, sampling distributions, introduction to mathematical theory of statistical inference, including methods of moments, estimators, maximum likelihood estimators, sufficient statistics, interval estimates, and hypothesis testing.

Prerequisites: MATH 352<sup>D</sup> or STAT 352<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**STAT 354 - Mathematical Statistics III**

Stochastic processes and statistical inference including: Type I and Type II errors, MLE, Neyman-Pearson lemma, order statistics, Poisson processes, ANOVA, nonparametric tests, comparing models and Bayesian parameter estimation.

Prerequisites: MATH 231<sup>D</sup> and (MATH 353<sup>D</sup> or STAT 353<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**STAT 363 - Statistical Learning**

The field of statistical learning encompasses the theory and data analytic techniques developed to process and make sense of evolving data challenges arising in the fields of data science and machine learning. This course will cover the theoretical underpinnings of supervised and unsupervised learning techniques, including generalized linear models, classification, dimension reduction, and cluster analysis. R and R-studio will be used for illustrative purposes. A working knowledge of linear algebra and multivariate calculus is assumed. Previous experience using R software package is also assumed.

Prerequisites: (MATH 309<sup>D</sup> or MATH 232<sup>D</sup>) and MATH 231<sup>D</sup> and STAT 252<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**STAT 372 - Forecasting & Time Series**

An introduction to creating, solving, analyzing and interpreting real-world time-series and forecasting models. Topics include linear, autoregressive, moving average and other forecasting and time-series techniques, transfer functions, multivariate model building, stationary and nonstationary techniques. Applications may include all areas where forecasting is required including transportation, finance, scheduling, networks, and supply chains. Appropriate software tools for analyzing forecasting models including software such as SAS and spreadsheet software will be taught.

Prerequisites: MATH 252<sup>C</sup> or STAT 252<sup>C</sup> or MATH 350<sup>C</sup> or STAT 350<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**STAT 373 - Statistical Quality Control**

A comprehensive coverage of modern quality control techniques including the design of statistical process control systems, acceptance sampling and process improvement.

Prerequisites: MATH 230<sup>C</sup> and (STAT 252<sup>C</sup> or STAT 311<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**STAT 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**STAT 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**STAT 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**STAT 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**STAT 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**STAT 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Actuarial Science, Minor

Actuaries use mathematics, statistics, predictive analytics, finance, and economics to predict the occurrence of uncertain events and their financial impact to minimize risk in business, finance, government, insurance, retirement planning, etc. Actuarial careers are always listed among the top ten jobs in the world based on salary, work/life balance, low levels of stress, and lateral and upward mobility. It is one of the most clearly defined career paths for mathematicians. The advanced training actuaries acquire in predictive analytics enables them to make important contributions to many fields including sports analytics. The Actuarial Science Minor (<https://www.sru.edu/academics/majors-and-minors/actuarial-studies-minor/>) provides the coursework to prepare students for up to five actuarial exams and Validation by Educational Experience (VEE) credit in all three areas approved by the Society of Actuaries.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Actuarial Science, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/actuarial-studies-minor/>)

Mathematics and Statistics Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/mathematics-and-statistics/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 9 credit hours of MATH/STAT in their minor from SRU
- Students enrolled in both the Minor in Actuarial Science and Minor in Statistics must complete at least 9 credits in each of these minors that are NOT being counted in the other.
- Mathematics majors must choose at least 15 credit hours in this minor distinct from those being counted toward the major.
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.
- Note: VEE Credit – complete requirements for Society of Actuaries VEE credit in at least two areas. Students must earn a 'B' or better in each course in the VEE areas in order to earn the credit.
- VEE Areas:
  - Mathematical Statistics: STAT 352 and STAT 353
  - Accounting and Finance: FIN 320 and ACCT 209

- Economics: ECON 201/ECON 202 sequence or ECON 301/ECON 302 sequence

Code	Title	Hours
<b>Required Courses for Minor in Actuarial Studies</b>		
MATH 280	Theory of Interest	3
STAT 352	Mathematical Statistics I	3
STAT 353	Mathematical Statistics II	3
<b>Required Courses for Non-Mathematics Majors</b>		
Math majors may not count these course in the Actuarial Studies Minor		
MATH 225	Calculus I	4
MATH 230	Calculus II	4
<b>Electives</b>		
Select courses from below to reach 24 credits total for this minor: <sup>1</sup>		7-15
ACCT 209	Financial Accounting	
ACCT 210	Managerial Accounting	
CPSC 323	Fundamentals of Database Systems	
CPSC 358	Simulation	
ECON 201	Principles of Macroeconomics	
ECON 202	Principles of Microeconomics	
ECON 301	Macroeconomic Analysis	
ECON 302	Microeconomic Analysis	
ECON 312	Critical Choices in Health Care Policy	
ECON 318	Introduction to Econometrics	
ENGL 205	Introduction to Professional Writing	
FIN 320	Managerial Finance	
FIN 321	Investments	
FIN 323	Financial Markets and Institutions	
FIN 326	Intermediate Corporate Finance	
FIN 329	Principles of Insurance	
MATH 231	Calculus III	
MATH 311	Deterministic Models of Operations Research	
MATH 315	Numerical Mathematics	
MATH 335	Mathematical Modeling	
MATH 482	Actuarial Mathematics	
MATH 484	Life Contingencies	
STAT 252	Introduction to Statistical Modeling	
STAT 254	Nonparametric Statistics	
STAT 256	Statistical Computing	
STAT 354	Mathematical Statistics III	
STAT 363	Statistical Learning	
<b>Total Hours</b>		<b>24</b>

- <sup>1</sup>
- ACCT 209, ACCT 210, ECON 201, ECON 202 may not be used by students from the School of Business
  - MATH 231 may not be used by Math majors

- \*
- Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Minor in Actuarial Science (52H)  
This program is effective as of Fall 2021  
Revised 07.27.2021  
UCC 10.13.2020

## Elementary School Mathematics, Minor

SRU's minor in Elementary School Mathematics is a strong add-on for degrees in Early Childhood Education or Special Education. Three of the required courses are already part of those majors, setting many students up to finish this minor with just 4 further courses. This focused math credential can help a teacher's job application to stand out among the competition: it highlights flexibility, reliability, and potential for greater creativity and depth in teaching math to children.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Elementary School Mathematics, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/elementary-school-math-minor/>)

Mathematics and Statistics Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/mathematics-and-statistics/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 9 credit hours of MATH/STAT in their minor from SRU
- Students enrolled in both the Minor in Middle School Mathematics and the Minor in Elementary School Mathematics must complete at least 9 credits in each of these minors that are NOT being counted in the other.
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

- ELEC 340 has an off-campus field component and requires appropriate teacher clearances. Contact the instructor before enrolling in ELEC 340.

Code	Title	Hours
<b>Required Mathematics Courses</b>		
MATH 118	Elementary Geometry	3
MATH 210	Mathematics for Elementary Teachers I	3
MATH 310	Mathematics for Elementary Teachers II	3
ELEC 340	Mathematics Methods and Strategies for PRE K - 4 Teachers	3
<b>Additional Courses</b>		
Select three courses of the following:		9
MATH 113	Mathematics as a Liberal Art	
MATH 117	Quantitative Reasoning	
MATH 122	Finite Mathematics with Matrices	
MATH 125	Precalculus	
MATH 131	Discrete Mathematics	
STAT 124	Introduction to Survey Methods	
STAT 152	Elementary Statistics I	
STAT 252	Introduction to Statistical Modeling	
STAT 318	Statistical Study Design	
<b>Total Hours</b>		<b>21</b>

- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Minor in Elementary School Math (52B)  
This program is effective as of Summer 2022  
Revised 04.21.2022  
UCC 02.15.2022

## Mathematics, Bachelor of Science (BS)

Students seeking state certification in secondary education must also complete requirements for a Master of Education degree, a one-year program at SRU. All of our programs are designed to steadily develop the quantitative, deductive and inductive reasoning skills that mathematicians must have.

## Program Learning Outcomes

- Students graduating with a degree in Mathematics will:
  - Use mathematics knowledge to solve theoretical and applied problems.
  - Apply rigorous deductive reasoning to prove mathematics results.
  - Use technology to perform and interpret mathematics analyses.
  - Communicate mathematics knowledge to both expert and non-technical audiences.
  - Demonstrate professional integrity and accountability in the use and communication of mathematics

## Related Links

Mathematics, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/mathematics/>)

Mathematics and Statistics Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/mathematics-and-statistics/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Basic Math Requirement	0-3
	Computer Competency	0-3
	Major Requirements	60
	Natural Science & Math College-Wide Requirements (included in Rock Studies 2)	12
	Electives	15

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 225	Calculus I	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3

<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	4
& CHEM 111	and General Chemistry I Lab	
<i>Physical Sciences Inquiry</i>		
PHYS 211	General Physics I with Lab	4
or PHYS 216	University Physics 1 with Lab	
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>45</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

Major Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above
- 12 math/statistics credits must be taken at the 300-400 level at SRU

Code	Title	Hours
<b>Mathematics Core Courses</b>		
MATH 131	Discrete Mathematics <sup>1,2</sup>	3
MATH 230	Calculus II <sup>1,2</sup>	4
MATH 235	Foundations of Mathematical Proof <sup>1,2</sup>	3
MATH 231	Calculus III <sup>1</sup>	4
MATH 232	Linear Algebra	3
MATH 301	Differential Equations I <sup>1</sup>	3
MATH 313	Introductory Analysis I <sup>1</sup>	3
MATH 325	Abstract Algebra I <sup>1</sup>	3
MATH 491	Mathematics Seminar <sup>1</sup>	1
STAT 352	Mathematical Statistics I <sup>1</sup>	3
Subtotal		30
<b>Required Electives</b>		
Choose five additional MATH/STAT courses <sup>3</sup>		15
Subtotal		15
<b>Mathematics Sequences</b>		

Two sequences are required - credits earned from these courses will be applied to above requirements.

Select two of the following sequences:		
One sequence must include MATH 313 & MATH 314 or MATH 325 & MATH 326		
MATH 301 & MATH 302	Differential Equations I and Differential Equations II <sup>1</sup>	
MATH 301 & MATH 411	Differential Equations I and Partial Differential Equations <sup>1</sup>	
MATH 311 & MATH 312	Deterministic Models of Operations Research and Stochastic Models of Operations Research <sup>1</sup>	
MATH 313 & MATH 314	Introductory Analysis I and Introductory Analysis II <sup>1</sup>	
MATH 325 & MATH 326	Abstract Algebra I and Abstract Algebra II <sup>1</sup>	
STAT 352 & STAT 353	Mathematical Statistics I and Mathematical Statistics II <sup>1</sup>	

<b>Approved Minors</b>		
Select at least one of the following minors: <sup>4</sup>		15
Actuarial Science (p. 487)		
Biology (p. 353)		
Chemistry (p. 401)		
Computing (p. 426)		
Environmental Science (p. 460)		
Geology (p. 474)		
Geophysics (p. 475)		
Meterology (p. 475)		
Philosophy (p. 1057)		
Physics (p. 551)		
Psychology (p. 711)		

Public Health (p. 743)	
Secondary School Mathematics (p. 495)	
Statistics (p. 496)	
<b>Total Hours</b>	<b>60</b>

- <sup>1</sup> Course counts for 50% of Major requirements and Major GPA
  - <sup>2</sup> Minimum grade of C required to register for 300-400 level math
  - <sup>3</sup> At most one at 200 level, other 300 level or above (except MATH 210, MATH 225, MATH 310, STAT 350)
  - <sup>4</sup> Must compete at least 15 credits distinct from courses selected above (MATH 225 will not count as a distinct course).
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

Natural Science and Math College-Wide Requirements

Code	Title	Hours
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
MATH 225	Calculus I	4
PHYS 211	General Physics I with Lab	4
or PHYS 216	University Physics 1 with Lab	
<b>Total Hours</b>		<b>12</b>

Computer Programming Language

Code	Title	Hours
Competency in an approved Computer Programming Language is Required - See Advisor Approval		
CPSC		

Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MATHEMATICS - BS (6152)

This program is effective as of Fall 2022.

Revised 03.31.2022

UCC 10.05.2021

Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
MATH 225	Calculus I	4
STAT 152	Elementary Statistics I	3
PHIL 113	Formal Logic	3
General Education Elective		3



ESAP 101	FIRST Seminar *	1
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
MATH 230	Calculus II	4
MATH 131	Discrete Mathematics	3
PHYS 211	General Physics I with Lab	4
CPSC 146	Programming Principles	3
<b>Hours</b>		<b>14</b>
<b>Second Year</b>		
<b>Fall</b>		
MATH 231	Calculus III	4
STAT 352	Mathematical Statistics I	3
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
General Education Elective		3
General Education Elective		3
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
MATH 235	Foundations of Mathematical Proof	3
MATH 301	Differential Equations I	3
200/300 level MATH/STAT elective		3
General Education Elective		3
General Education Elective		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
MATH 313	Introductory Analysis I	3
MATH 232	Linear Algebra	3
General Education Elective		3
General Education Elective		3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
MATH 325	Abstract Algebra I	3
300 level MATH elective		3
General Education Elective		3
General Education Elective		3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
300 level MATH elective		3
300 level MATH elective		3
General Education Elective		3
General Education Elective		3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
300 level MATH elective		3
MATH 491	Mathematics Seminar	1
Elective		3
Elective		3

Elective	3
<b>Hours</b>	<b>13</b>
<b>Total Hours**</b>	<b>118</b>

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6152

Revised date: 9-2019

## Mathematics, Minor

Mathematics has often been referred to as the “language of the sciences” because of the fundamental way in which the sciences depend on it. In modern society, its applications extend well beyond the sciences to many diverse fields including engineering, finance, economics, supply chain management, sports analytics, statistics, and data science. The Mathematics Minor prepares students for the mathematical rigors of these fields. It also provides outstanding preparation for anyone planning to attend many graduate programs including engineering, finance, economics, and data science.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Mathematics, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/mathematics/>)

Mathematics and Statistics Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/mathematics-and-statistics/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 9 credit hours of MATH/STAT in their minor from SRU
- Students enrolled in both the Minor in Mathematics and the Minor in Statistics must complete at least 9 credits in each of these minors that are NOT being counted in the other.
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Mathematics Courses</b>		
MATH 225	Calculus I	4
MATH 230	Calculus II	4
MATH 231	Calculus III	4

**Additional Courses**

Select three of the following: 9

MATH 131	Discrete Mathematics
MATH 232	Linear Algebra
MATH 235	Foundations of Mathematical Proof
MATH 240	Linear Algebra and Differential Equations <sup>1</sup>
MATH 301	Differential Equations I
MATH 302	Differential Equations II
MATH 304	Geometric Structures
MATH 311	Deterministic Models of Operations Research
MATH 312	Stochastic Models of Operations Research
MATH 313	Introductory Analysis I
MATH 314	Introductory Analysis II
MATH 315	Numerical Mathematics
MATH 317	Complex Variables
MATH 320	Theory of Numbers
MATH 325	Abstract Algebra I
MATH 326	Abstract Algebra II
MATH 331	Mathematical Methods of Physics <sup>2</sup>
MATH 335	Mathematical Modeling
MATH 411	Partial Differential Equations
STAT 350	Applied Statistics
STAT 352	Mathematical Statistics I
STAT 353	Mathematical Statistics II

**Total Hours** 21

<sup>1</sup> Indicates that students may count at most one of MATH 240 or MATH 232 in this minor.

<sup>2</sup> In all students' programs, MATH 331 may be counted as a mathematics course or as a physics course, but not both.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**Important Curriculum Guide Notes**

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Minor in Mathematics (52A)

This program is effective as of Fall 2022

Revised 03.23.2022

UCC 10.05.2021

# Mathematics/Secondary School Mathematics Minor, Teacher Certification (BS)

## Requirements for the Certification

Secondary teacher certification in some fields is earned through the master of education degree at Slippery Rock University. Students seeking secondary school teaching certification in mathematics must earn a bachelor of arts or a bachelor of science degree in mathematics and contact the Department of Secondary Education/Foundations of Education concerning its graduate program in education. Information about this program, including prerequisites for admission, may be obtained from the secondary education/foundations of education office in 114 McKay Education Building.

## Program Learning Outcomes

- Students graduating with a degree in Mathematics will:
  - Use mathematics knowledge to solve theoretical and applied problems.
  - Apply rigorous deductive reasoning to prove mathematics results.
  - Use technology to perform and interpret mathematics analyses.
  - Communicate mathematics knowledge to both expert and non-technical audiences.
  - Demonstrate professional integrity and accountability in the use and communication of mathematics

## Related Links

Middle Level Education - Mathematics Program Page (<https://www.sru.edu/academics/majors-and-minors/middle-level-education-mathematics/>)

Mathematics and Statistics Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/mathematics-and-statistics/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	60
	Natural Science & Math College-Wide Requirements	12
	Electives	15

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 225	Calculus I	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	4
& CHEM 111	and General Chemistry I Lab	
<i>Physical Sciences Inquiry</i>		
PHYS 211	General Physics I with Lab	4
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>45</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		

CPSC 100	Introduction to Computing for Liberal Arts
CPSC 110	Computer Concepts
CPSC 130	Introduction to Computing and Programming
PE 202	Technology for Wellness
<hr/>	
<b>Total Hours</b>	<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above
- 12 math credits must be taken at the 300-400 level at SRU

Code	Title	Hours
<b>Mathematics Core Courses</b>		
MATH 131	Discrete Mathematics <sup>1,2</sup>	3
MATH 230	Calculus II <sup>1,2</sup>	4
MATH 235	Foundations of Mathematical Proof <sup>1,2</sup>	3
MATH 231	Calculus III <sup>1</sup>	4
MATH 301	Differential Equations I <sup>1</sup>	3
MATH 232	Linear Algebra <sup>1</sup>	3
MATH 313	Introductory Analysis I <sup>1</sup>	3
MATH 325	Abstract Algebra I <sup>1</sup>	3
STAT 352	Mathematical Statistics I <sup>1</sup>	3
MATH 491	Mathematics Seminar <sup>1</sup>	1
Subtotal		30
<b>Required Electives</b>		
Choose five additional courses required <sup>3</sup>		15
Subtotal		15
<b>Mathematics Sequences</b>		
Two sequences are required - credits earned from these courses will be applied to above requirements.		
Select one of the following:		0

MATH 301 & MATH 302	Differential Equations I and Differential Equations II <sup>1</sup>
MATH 301 & MATH 411	Differential Equations I and Partial Differential Equations <sup>1</sup>
MATH 311 & MATH 312	Deterministic Models of Operations Research and Stochastic Models of Operations Research <sup>1</sup>
MATH 325 & MATH 326	Abstract Algebra I and Abstract Algebra II <sup>1</sup>
Select one of the following:	
MATH 313 & MATH 314	Introductory Analysis I and Introductory Analysis II <sup>1</sup>
STAT 352 & STAT 353	Mathematical Statistics I and Mathematical Statistics II <sup>1</sup>
Subtotal	

## Approved Minors

Select at least one of the following minors: <sup>4</sup>	15
Actuarial Science (p. 487)	
Biology (p. 353)	
Chemistry (p. 401)	
Computing (p. 426)	
Environmental Science (p. 460)	
Geology (p. 474)	
Geophysics (p. 475)	
Meteorology (p. 475)	
Philosophy (p. 1057)	
Physics (p. 551)	
Psychology (p. 711)	
Public Health (p. 743)	
Secondary School Mathematics (p. 495)	
Statistics (p. 496)	
<b>Total Hours</b>	<b>60</b>

- <sup>1</sup> Course counts for 50% of Major requirements and Major GPA
- <sup>2</sup> Minimum grade of C required to register for 300-400 level math
- <sup>3</sup> At most one at 200 level, other 300 level or above (except MATH 210, MATH 225, MATH 310)
- <sup>4</sup> Must compete at least 15 credits distinct from courses selected above (MATH 225 will not count as a distinct course).
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Secondary School Mathematics Minor Requirements

- At least six credits must be 300-level or higher. At least nine credit hours of mathematics courses used for the minor must be taken at Slippery Rock University.
- BS-Mathematics majors must choose at least 15 credits distinct from those being counted toward major.

Code	Title	Hours
<b>Required Mathematics Courses</b>		
MATH 235	Foundations of Mathematical Proof	3
MATH 304	Geometric Structures	3
MATH 320	Theory of Numbers	3
SPED 121	Overview of Special Education	3
SEFE 338	Standards-Based Instruction & Assessment in the Inclusionary Classroom	3
<b>Additional Courses</b>		
Select three of the following:		9
MATH 230	Calculus II	
MATH 231	Calculus III	
STAT 252	Introduction to Statistical Modeling	
SEFE 230	Production and Utilization of Instructional Technology	
SEFE 245	Middle Level Learning Theory	
SEFE 250	Pre, Early, & Adolescent Development	
SEFE 300	Middle Level Cognitive Development	
SEFE 311	Teaching of Mathematics in the Middle School	
SEFE 326	ELL Strategies and Practice	

SEFE 370	Educational Measurements, Assessment and Evaluation
SEFE 380	History and Philosophy of Education
PHIL 313	Symbolic Logic
PHIL 351	Philosophy of Natural Science
<b>Total Hours</b>	<b>24</b>

- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
MATH 225	Calculus I	4
PHYS 211	General Physics I with Lab	4
<b>Total Hours</b>		<b>12</b>

## Computer Programming Language

Code	Title	Hours
Competency in an approved Computer Programming Language is Required - See Advisor Approval		
CPSC		

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MATHEMATICS w/ SECONDARY SCHOOL MATHEMATICS MINOR - BS (6152 AND 52G)

This program is effective as of Fall 2019.

Revised 08.03.2021

UCC 10.15.2019

## Middle School Mathematics, Minor

SRU's minor in Middle School Mathematics is a useful add-on for students planning to teach secondary math, or non-math subjects in middle school. Future secondary teachers gain deeper insight into teaching students at the younger end of their Grades 7-12 certification, and future middle school teachers in English, Social Studies, or Science can enhance their ability to handle a dual-subject assignment with just 3-4 extra courses beyond what their major already requires. This additional credential can help a teacher's job application to stand out among the competition: it highlights flexibility, reliability, and potential for greater creativity and depth in teaching math.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Middle School Mathematics, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/middle-school-math-minor/>)

Mathematics and Statistics Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/mathematics-and-statistics/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

2.0 or higher Minor GPA

### Minor Requirements

- Students must complete at least 9 credit hours of MATH/STAT in their minor from SRU
- A minimum of 6 credit hours must be upper division (coursed numbered 300 and above)
- A minor shall be no fewer than 18 credits.
- Students majoring in Middle Level Education: Mathematics (in the Department of Secondary Education/Foundations of Education) may NOT declare this minor.
- Middle Level Education majors (in the Department of Secondary Education/Foundations of Education) CANNOT apply SEFE 200 to the Middle School Mathematics Minor.
- Students enrolled in both the Minor in Middle School Mathematics and the Minor in Elementary School Mathematics must complete at least 9 credits in each of these minors that are NOT being counted in the other.

Code	Title	Hours
<b>Required Mathematics Courses</b>		
Select one of the following:		3
MATH 118	Elementary Geometry	
MATH 304	Geometric Structures <sup>1</sup>	
MATH 210	Mathematics for Elementary Teachers I	3
MATH 310	Mathematics for Elementary Teachers II	3
Select one of the following:		3
SEFE 311	Teaching of Mathematics in the Middle School	
ELEC 340	Mathematics Methods and Strategies for PRE K - 4 Teachers <sup>2</sup>	
<b>Additional Courses</b>		
Select three of the following:		9-12
MATH 113	Mathematics as a Liberal Art	
MATH 117	Quantitative Reasoning	
MATH 122	Finite Mathematics with Matrices	
MATH 125	Precalculus	
MATH 131	Discrete Mathematics <sup>1</sup>	
MATH 225	Calculus I <sup>1</sup>	
MATH 230	Calculus II <sup>1</sup>	
MATH 231	Calculus III <sup>1</sup>	
MATH 232	Linear Algebra <sup>1</sup>	
MATH 235	Foundations of Mathematical Proof <sup>1</sup>	

MATH 240	Linear Algebra and Differential Equations <sup>1</sup>
MATH 320	Theory of Numbers <sup>1</sup>
SEFE 200	Introduction to Education, Teaching Methods and Field
STAT 124	Introduction to Survey Methods
STAT 152	Elementary Statistics I
STAT 252	Introduction to Statistical Modeling
STAT 318	Statistical Study Design

**Total Hours**

**21-24**

<sup>1</sup> May not be used by Mathematics majors as courses that count toward the Middle School Mathematics minor.

<sup>2</sup> ELEC 340 has an off-campus field component and requires appropriate teacher clearances. Contact the instructor before enrolling in ELEC 340

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Minor in Middle School Math (52C)

This program is effective as of Summer 2022

Revised 04.21.2022

UCC 08.18.2022

## Secondary School Mathematics, Minor

The high school mathematics curriculum covers a wide range of content including algebra, geometry, trigonometry, calculus, and statistics. Secondary school mathematics minors not only learn these topics at a fundamental level, but they also learn how to effectively communicate these concepts to students at a grade appropriate level. Most students completing the secondary school mathematics minor go on to get their permanent teaching certification and work as high school math teachers. Additionally, some students choose to work with math tutoring centers, math summer camps, accelerated math programs, and/or science museums.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Middle Level Education: Mathematics Program Page (<https://www.sru.edu/academics/majors-and-minors/middle-level-education-mathematics/>)



Mathematics and Statistics Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/mathematics-and-statistics/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

2.0 or higher Minor GPA

### Minor Requirements

- A minimum of 6 credit hours must be upper division (courses numbered 300 and above).
- At least 9 credit hours of MATH/STAT courses used for the minor must be taken at Slippery Rock University.
- Middle Level Education majors (in the Department of Secondary Education/Foundations of Education) CANNOT apply SEFE 200 to the Secondary School Mathematics Minor.
- A minor shall be no fewer than 18 credits.
- BS-Mathematics majors must choose at least 15 credits distinct from those being counted toward major.
- Students minoring in both Mathematics and Second School Mathematics must complete 9 credits in each minor that are not applied to the other minor.

Code	Title	Hours
<b>Required Mathematics Courses</b>		
MATH 235	Foundations of Mathematical Proof	3
MATH 304	Geometric Structures	3
MATH 320	Theory of Numbers	3
SPED 121	Overview of Special Education	3
SEFE 338	Standards-Based Instruction & Assessment in the Inclusionary Classroom	3
<b>Additional Courses</b>		
Select three of the following:		9
MATH 230	Calculus II <sup>1</sup>	
MATH 231	Calculus III <sup>1</sup>	
STAT 124	Introduction to Survey Methods	
STAT 252	Introduction to Statistical Modeling	
STAT 318	Statistical Study Design	
SEFE 200	Introduction to Education, Teaching Methods and Field	
SEFE 230	Production and Utilization of Instructional Technology	
SEFE 245	Middle Level Learning Theory	
SEFE 250	Pre, Early, & Adolescent Development	
SEFE 300	Middle Level Cognitive Development	
SEFE 311	Teaching of Mathematics in the Middle School	
SEFE 326	ELL Strategies and Practice	
SEFE 342	Educational Psychology for Diverse Learners	
SEFE 370	Educational Measurements, Assessment and Evaluation	
SEFE 380	History and Philosophy of Education	

PHIL 313	Symbolic Logic
PHIL 351	Philosophy of Natural Science
<b>Total Hours</b>	<b>24</b>

- <sup>1</sup> Course may not be used by Mathematics majors
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Minor in Secondary Mathematics (52G)

This program is effective as of Summer 2022

Revised 04.22.2022

UCC 02.15.2022

## Statistics, Minor

Statisticians specialize in the collection, organization, presentation, and analysis of data. They work with professionals from a variety of fields to leverage data to inform almost every aspect of society and life: business practice, scientific research, finance, and public policy, among other areas. In 2022, "Statistician" is one of the top three jobs in the world based on income, stress level, quality of life, and growth potential, and the field has a projected growth of 35% (careercast.com)!

The Department of Mathematics and Statistics minor in statistics will give you both a good theoretical grounding in statistics as well as a broad understanding of applied statistics through project-based coursework. You will learn multiple computer-based platforms for completing statistical tasks, including Microsoft Excel, R, SAS, and Python. We will provide you with ample opportunities to work on research projects, and we will encourage you to present your research at SRU's undergraduate symposium and at professional conferences. Because of the amount of experience our students gain working with different statistical software packages, completing analysis projects, and engaging in research, our students are sought after both for internships while they are completing their undergraduate studies and entry-level positions for statistics and data science.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Statistics, Minor Program Page ([https://www.sru.edu/academics/majors-and-minors/statistics-\(minor\)/](https://www.sru.edu/academics/majors-and-minors/statistics-(minor)/))

Mathematics and Statistics Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/mathematics-and-statistics/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 9 credit hours of MATH/STAT in their minor from SRU.
- Students enrolled in both the Minor in Mathematics and the Minor in Statistics must complete at least 9 credits in each of these minors that are NOT being counted in the other.
- Students enrolled in both the Minor in Actuarial Science and the Minor in Statistics must complete at least 9 credits in each of these minors that are NOT being counted in the other.
- Mathematics majors must choose at least 15 credit hours in this minor distinct from those being counted toward the major.
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Courses</b>		
STAT 152	Elementary Statistics I	3
STAT 252	Introduction to Statistical Modeling	3
STAT 256	Statistical Computing	3
STAT 352	Mathematical Statistics I	3
STAT 353	Mathematical Statistics II	3
<b>Required Courses for Non-Mathematics Majors</b>		
Mathematics majors may not count these courses in the Minor in Statistics:		
MATH 225	Calculus I	
MATH 230	Calculus II	
<b>Electives</b>		
Select courses of the following to reach 24 credits total for this minor.*		3-9
BIOL 325	Biometry with Lab	
CPSC 323	Fundamentals of Database Systems	
CPSC 405	Data Mining & Analysis	
CPSC 480	Topics in Computer Science: Machine Learning	
ECON 318	Introduction to Econometrics	
HLTH 312	Data Management for Health Science	
HLTH 313	Biostatistics	
MATH 231	Calculus III	
STAT 318	Statistical Study Design	
STAT 354	Mathematical Statistics III	
STAT 363	Statistical Learning	
STAT 372	Forecasting & Time Series	
STAT 373	Statistical Quality Control	
PSYC 421	Advanced Behavioral Statistics	
<b>Total Hours</b>		<b>24</b>

- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Minor in Statistics (52D)

This program is effective as of Summer 2022

Revised 04.21.2022

UCC 02.15.2022

## Physics and Engineering

Chair	Secretary	Location	Department Phone
Dr. Athula Herat	Leslie Baker	208 Vincent Science Center	724-738-2074

Department Web Site URL (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/physics-and-engineering/>)

Civil Engineering Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/CivilEngineering-fs.pdf>)

Industrial and Systems Engineering Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/industeng-fs.pdf>)

Mechanical Engineering Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/MechanicalEngineering-fs.pdf>)

Petroleum and Natural Gas Engineering Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/PNGE-fs.pdf>)

Physics Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/physics-fs.pdf>)

## Faculty

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B.S., Nanchang University

## Programs

### Majors

- Civil Engineering, Bachelor of Science (BS) (p. 518)
- Industrial and Systems Engineering, Bachelor of Science (BS) (p. 521)
- Mechanical Engineering, Bachelor of Science (BS) (p. 524)
- Petroleum and Natural Gas Engineering, Bachelor of Science (BS) (p. 526)
- Physics, Bachelor of Arts (BA) (p. 529)
- Physics, Bachelor of Arts (BA) - Pre-Master of Education (7-12) (p. 532)
- Physics, Bachelor of Arts (BA) / Pre-Engineering (Pitt) (3+2) (p. 534)
- Physics, Bachelor of Arts (BA) / Pre-Engineering (WVU) (3+2) (p. 536)
- Physics, Bachelor of Arts (BA) / Pre-Engineering (YSU) (3+2) (p. 538)
- Physics, Bachelor of Arts (BA) / Pre-Engineering Technology (YSU) (3+2) (p. 540)
- Physics, Bachelor of Science (BS) (p. 542)
- Physics, Bachelor of Science (BS) - Concentration in Computational Biophysics (p. 544)
- Physics, Bachelor of Science (BS) - Concentration in Computational Physics (p. 547)
- Physics, Bachelor of Science (BS) - Pre-Master of Education (7-12) (p. 549)

## Minors

- Physics, Minor (p. 551)

## Courses

### CIVL Courses

#### CIVL 139 - Foundations of Academic Discovery

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

#### CIVL 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

#### CIVL 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

#### CIVL 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

#### CIVL 210 - Elementary Survey

Introductory course in surveying methods and theory. Topics will include surveying, and route surveying.

Prerequisite: MATH 225<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

#### CIVL 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

#### CIVL 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

#### CIVL 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

#### CIVL 310 - Structural Engineering

Introduction to the elastic behavior of structural components. Analysis of statically determinate systems. Deflection calculations by virtual work and elastic load methods. Analysis of simple statically indeterminate structures. Influence lines. Interaction of structural components. Typical structural engineering loads.

Prerequisite: ENGR 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

#### CIVL 320 - Transportation Engineering

Introduction to basic concepts in transportation engineering including: planning, design, and operations. Introduces the challenges and issues in modeling transportation problems. Studies of various concepts related to the design of highway facilities, level of service, and demand for transportation services. Concepts related to signal optimization, policy implications and the basics of transportation planning.

Prerequisite: MATH 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

#### CIVL 330 - Environmental Engineering

A course in environmental engineering fundamentals that applies biological, chemical, and mathematical principles to solve environmental engineering problems using the mass balance approach.

Prerequisites: MATH 230<sup>D</sup> and BIOL 101<sup>D</sup> and CHEM 107<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 340 - Geotechnical Engineering**

Soil properties, identification and classification of earth material; subsurface exploration; soil strength, stresses, settlement, substructure design; computer applications.

Prerequisite: ENGR 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 350 - Water Resources Engineering**

This course is designed to review the fundamentals and practices of water resources engineering with a focus on engineering applications of hydraulics and hydrology. The concepts of fluid mechanics (hydrostatics, conservation laws) will be applied to analyze flow phenomena in demonstrations and field trips.

Prerequisite: ENGR 301<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 410 - Structural Steel Design**

This course covers the analysis and design of structural steel members for tensile, compressive, flexural and combined loading.

Prerequisite: CIVL 310<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 411 - Reinforced Concrete Design**

This course covers strength design concepts, beams, columns, slabs, retaining walls, single and combined footings with computer applications.

Prerequisite: CIVL 310<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 412 - Finite Element Analysis**

Modern analysis techniques used to investigate a variety of systems in engineering and science. Computational models of problems are developed using energy concepts, structural mechanics, and matrix operations. The methods used are implemented using a general finite element program and the accuracy of the results is evaluated. The learned theoretical approach is applied to common structural elements such as trusses, beams, frames, and plates.

Prerequisite: CIVL 310<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 420 - Traffic Engineering**

This course covers the fundamentals of traffic engineering and traffic flow theory: traffic signal design, intersection design, and traffic impact studies. Students will be taught using Highway Capacity Software, SYNCHRO, and other traffic software packages.

Prerequisite: CIVL 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 421 - Highway Engineering**

Principles of geometric design of highways, intersections, interchanges, and terminals. Practical issues of vertical and horizontal curvature, highway evaluation, driver and vehicle dynamics, and traffic safety are also addressed. Computer-aided design and modeling.

Prerequisite: CIVL 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 422 - Transportation Terminal Design**

The course covers the transportation design of airports, rail stations and truck terminals to facilitate the transport of passengers and freight in the transportation systems. Terminals are designed to provide security, storage, and access to different modes of transportation.

Prerequisite: CIVL 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**CIVL 430 - Storm Water Management**

Quality and quantity of urban storm water. Receiving water problems and sources of pollutants. Runoff quality and quantity characteristics. Selection and design of controls; regulations.

Prerequisite: CIVL 350<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 431 - Environmental Engineering Design**

Process design of treatment/remediation systems to solve specific environmental problems, including evaluation alternatives and computer simulation.

Prerequisite: CIVL 330<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 432 - Groundwater Hydrology**

The course covers the fundamental science and engineering behind groundwater systems, including but not limited to: the hydrologic cycle, groundwater flow, and wellhead protection and management.

Prerequisite: CIVL 350<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 440 - Construction Management**

Provides students with an overview of the responsibilities and risk associated with management within the construction industry. Emphasis is given to responsibilities and relationships between owners, contractors, labor and suppliers, construction estimates and schedules, construction contracts and safety.

Prerequisite: CIVL 340<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 441 - Sustainable Development**

Provides an overview of sustainable development with emphasis on the role of the engineer. Study the role of LEED and other sustainable development programs in changing development design.

Prerequisite: CIVL 330<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 460 - Capstone Design I**

This course will provide students with the opportunity to work as part of a multi-disciplinary Civil Engineering design team. The course will consist of developing the preliminary design plans with presentations and reports. Students will learn about the regulatory process, LEED design, and site planning. Lectures in professional practice and teaming will augment the design project.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Civil Engineering.

**CIVL 461 - Capstone Design II**

This course will provide students with the opportunity to work as part of a multi-disciplinary Civil Engineering design team. The course will consist of a design project with presentations and reports. Lectures in professional practice and teaming will augment the design project.

Prerequisite: CIVL 460<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Civil Engineering.

**CIVL 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## ENGR Courses

### ENGR 110 - Introduction to Engineering

The first in a two-semester course sequence aiming to provide students with an introduction to engineering, design process, and tools needed in the engineering professions. This course introduces students to the different disciplines of engineering, professional and ethical aspects of engineering, teamwork, engineering design process and problem solving, and various computer applications.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms

### ENGR 120 - Engineering Design Tools

This is the second in a two-semester course sequence aiming to provide students with an introduction to engineering, design process, and tools needed in the engineering professions. This course focuses on the design process, introduction to engineering computing tools, engineering graphics using a Computer Aided Design (CAD) software platform, and 3D printing. Students will learn the basic tools and techniques used in engineering design and problem solving.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

### ENGR 130 - Engineering Computing Tools

This course provides students with computing skills required in engineering. Course content includes structured programming, engineering problems and open-ended design projects, which are solved in teams with results professionally presented.

Credits: 2

Term(s) Typically Offered: Offered Fall & Spring Terms

### ENGR 139 - Foundations of Academic Discovery

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

### ENGR 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

### ENGR 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

### ENGR 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

### ENGR 210 - Statics

Includes the application of equilibrium conditions to structures, trusses, frames and machines, and beams with concentrated and distributed loads.

Prerequisites: PHYS 216<sup>D</sup> and MATH 230 (may be taken concurrently)<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

### ENGR 220 - Engineering Materials

This course covers the properties and uses of typical materials used in various engineering professions, their manufacturing processes, and an introduction to mechanical testing methods.

Prerequisite: CHEM 107<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

### ENGR 230 - Mechanics of Materials

This course provides a review of the basic mechanical properties of the solids with lab. Topics covered will include deformation and failure of solid bodies under the action of forces, stress-strain, Mohr's circle, generalized Hooke's Law, axial bending and buckling.

Prerequisites: ENGR 210<sup>D</sup> or PHYS 314<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

### ENGR 231 - Mechanics of Materials Lab

A laboratory course to accompany ENGR 230 Mechanics of Materials. Laboratory experiments are designed to introduce experimental techniques common to structural engineering, interpretation of experimental data, comparison of measurements to numerical/analytical predictions, and formal, engineering report writing.

Prerequisite: ENGR 230 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

### ENGR 240 - Dynamics

Integrates the subject content of kinematics and kinetics that deal respectively with the description of motion of bodies and the causes for their motion.

Prerequisites: PHYS 314<sup>D</sup> or ENGR 210<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**ENGR 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ENGR 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**ENGR 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ENGR 301 - Fluid Mechanics**

This course provides an overview of fluid statics and dynamics concepts. Topics covered will include fluid statics, laminar and turbulent flow of compressible and incompressible fluids, flow measurements, open channel flow and kinetics of fluids.

Prerequisites: ENGR 210<sup>D</sup> and MATH 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGR 310 - Introduction to Electrical Engineering**

This course provides a review of the basic concepts in electrical engineering. Topics covered will include electrical engineering units, circuit elements, circuit laws, measurement principles, mesh and node equations, network theorems, operational amplifier circuits, energy storage elements, sinusoids and phasors, sinusoidal steady state analysis, average and RMS values, complex power.

Prerequisites: PHYS 212<sup>D</sup> or PHYS 217<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Freshman 1, Freshman 2 or Sophomore 1.

**ENGR 320 - Thermodynamics**

This course provides a detailed review of the basic thermodynamic principles. Topics covered will include properties of ideal gases and vapors; first and second laws of thermodynamics; basic gas and vapor cycles; basic refrigeration.

Prerequisite: PHYS 217<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGR 340 - Engineering Economics**

This course covers the concepts of cash flow, cash flow equivalence, cash flow before taxes, depreciation and depletion, cash flows after taxes, profits, evaluation of alternatives, financial statements and multidisciplinary team project.

Prerequisite: MATH 225<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGR 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Graduate.

**ENGR 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGR 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGR 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGR 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGR 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## ISE Courses

**ISE 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**ISE 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ISE 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ISE 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ISE 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ISE 311 - Introduction to Operations Research**

Topics include deterministic methods in operations research. Linear programming, duality, integer programming, dynamic programming, nonlinear programming, inventory theory, transportation and assignment and network theory.

Prerequisites: MATH 231<sup>C</sup> or MATH 240<sup>C</sup> or (MATH 122<sup>C</sup> and MATH 230<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 330 - Six Sigma Methodology**

Statistical methods of Six Sigma used for efficient new product development as well as methods for process improvement. The math and methodology of six Sigma including DMAIC and DMADV processes. Topics will include measurement and analysis mathematical techniques. Design of experiment will be introduced. Case studies will be used to illustrate advanced concepts of Six Sigma.

Prerequisite: STAT 350<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 362 - Lean Systems**

The design and delivery of services. Topics include how to design and improve service offerings for sustained excellence, how to identify and overcome challenges in service delivery. Both traditional services as well as e-commerce service will be studied for both the private and public sector.

Prerequisite: ISE 330 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 370 - Design of Industrial Systems and Processes**

This course covers advanced topics in Applied Engineering Statistics. It includes the introduction to linear regression analysis, simple linear models, multiple linear models, residual analysis, indicator variables, variable selection process, ANOVA, introduction to design of Industrial systems and processes, basic designs, factorial designs, fractional factorial designs, blocking, Taguchi designs, and response surface methodology. Extensive use of statistical software will be introduced throughout the course.

Prerequisite: STAT 350<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 372 - Manufacturing Systems Design and Analysis**

Contemporary techniques used to design and analyze manufacturing systems for economic manufacture of products. Design of manufacturing systems (human and automated) to satisfy differing types of product demand will be explored.

Prerequisite: ENGR 340<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 373 - Quality Engineering**

A comprehensive coverage of modern quality control techniques including the design of statistical process control systems, acceptance sampling and process improvement.

Prerequisites: MATH 230<sup>D</sup> and (STAT 252<sup>D</sup> or STAT 350<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 382 - Sustainable Processes**

Exploration of the scientific and legal progress in sustainability. Students will learn both the theory of sustainability as well as how sustainable processes can be implemented throughout an organization.

Prerequisites: PHYS 217<sup>D</sup> and MATH 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 402 - Work Design**

Introductory tools required for analyzing and designing both the job and the worksite in a cost-effective manner, as well as measuring the resulting output. These tools include human information processing, basic auditory and visual displays, anthropometry and musculoskeletal principles, cumulative trauma disorders, work measurement and stopwatch time study. Students taking this course should be familiar with the basic concepts of cost.

Prerequisite: ISE 372 (may be taken concurrently)<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 410 - Engineering Project Management**

This course is an introduction to the concepts and practices of project management. It provides students with a basic exposure to the tasks and challenges facing today's engineering projects and in particular, those of the project manager. This course also provides students with the quantitative tools for the successful management of engineering projects. The problems of selecting projects, initiating projects, and operating and controlling projects will be discussed in this course.

Prerequisite: ENGR 340<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 420 - Simulation of Industrial Systems**

In this course, the student will develop an understanding and need for discrete event simulation in practice. The course will focus on basic and advanced concepts in simulation modeling including analyzing simulation results, and successfully developing simulation models useful in production/manufacturing, supply chains, transportation, and other areas related to industrial and Manufacturing Engineering. Simulation package such as ARENA will be integrated and used throughout.

Prerequisites: (MATH 311<sup>D</sup> or ISE 311<sup>D</sup>) and STAT 350<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**ISE 421 - Supply Chain & Logistics Engineering**

Overview of key logistics and supply chain management processes, concepts and methodologies. Emphasis is given to the Lean development of supply chain management, the analysis of logistics cost and service trade-offs among inventory transportation and warehousing activities, the strategic role of information technology in supply chains, the use of third-party logistics providers, and the methods of measuring the value of logistics performance. Instruction may include problem-based learning pedagogy.

Prerequisites: ISE 311 (may be taken concurrently)<sup>D</sup> and ISE 373<sup>\*D</sup> (may be taken concurrently).

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 430 - Production Planning & Control**

This course equips students with knowledge of fundamental issues in production and inventory planning and control while developing the students' modeling and analytical skills. This course emphasizes the application of industrial engineering theory and practice to the area of operations management and production planning/control. This course will cover analysis and understanding of forecasting, aggregate planning, operations strategy, capacity planning, supply-chain management, just-in-time systems, lean manufacturing, agile manufacturing, materials replacement planning, inventory management, and scheduling and sequencing.

Prerequisites: ENGR 340<sup>D</sup> and ISE 372<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 432 - Productivity Analysis**

Techniques for measuring and assessing productivity for output, labor, capital and input. Aggregation of productivity growth will also be discussed.

Prerequisite: MATH 231<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 440 - Health Care Systems Engineering**

The course examines the technical structure of the healthcare delivery system and the role that industrial engineering (IE) plays in its design and improvement. Included will be how healthcare systems work in hospitals, medical offices, clinics and other healthcare organizations. Traditional IE methods for improving quality, patient safety, and employee productivity and satisfaction will be present within a systematic application of value chain engineering designed to produce lean processes.

Prerequisites: ISE 311<sup>D</sup> and ISE 373<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 442 - Human Factors Engineering**

An analytic study of human factors that need to be taken into account in the design and engineering of complex workplace systems.

Body mechanics will be used to understand the needs of humans in the workplace under a variety of different constraints: physical demands, environmental conditions, human capability. system design considerations aimed at reducing safety hazards will be studied.

Prerequisite: ISE 402<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 460 - Engineering Risk Analysis**

This course is an introduction to risk, risk assessment, and risk management in engineering systems. It focuses on building mathematical models to assess and quantify risk principally by following the methodologies of probabilistic risk analysis. In particular, the course covers concepts of risk analysis, risks in engineered systems; methods of risk analysis, fault trees and event trees; quantification of probabilities, use of data, models, and expert judgments; risks and decisions, interlinking risk analysis with risk management; applications to cybersecurity.

Prerequisite: STAT 350<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 480 - Industrial and Systems Engineering Undergraduate Research**

Research and design problems of limited scope approved on an individual basis intended to promote independent study; results of study presented in writing.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

**ISE 487 - Industrial and Systems Engineering Senior Project I**

This course provides a proposal preparation for ISE 488 which includes defining a comprehensive problem in design involving systems in manufacturing, service, and other systems to improve efficiency and quality, and optimize the resources utilization.

Prerequisites: ISE 370<sup>D</sup> and ISE 420<sup>D</sup> and ISE 421<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 488 - Senior Project II**

Senior project in industrial and systems engineering. Requires students to complete a multi-dimensional project in their area of interest: industry, health-care, etc. The project must be approved by ISE faculty no later than the end of the fourth week of the start of the course. Students will be invited to propose their own projects or create one in collaboration with ISE faculty.

Prerequisite: ISE 487<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

**ISE 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## MECH Courses

**MECH 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**MECH 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MECH 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**MECH 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MECH 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MECH 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**MECH 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MECH 310 - Machines and Mechanisms**

Analysis of motion and forces in linkages and mechanisms. Synthesis of plane mechanisms, analysis of cams, gears and gear trains. Fundamentals of vibrations in machines. Analysis techniques include graphical, analytical and computational methods.

Prerequisite: ENGR 240<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 320 - Manufacturing Processes**

Introduction to properties and uses of engineering materials. Introduction to mechanical testing methods, metrology, tolerances, testing and inspection; semi-finished product manufacturing; macro-processing (forming, casting, powder metallurgy, metal working, composite fabrication); joining; nontraditional manufacturing processes; and surface processing.

Prerequisites: ENGR 220<sup>D</sup> and ENGR 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 330 - Introduction to Mechatronics**

Selection of mechanical and electronic components and integration of these components into complex systems. Hands-on laboratory and design experiments with components and measurement equipment used in the design of mechatronic products.

Prerequisite: ENGR 310<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 340 - Heat Transfer**

One-, two-, three-dimensional steady state conduction; transient conduction; free and forced convection; radiation; heat exchangers; heat and mass transfer by analytical, numerical analogical and experimental methods; design of thermal systems.

Prerequisites: ENGR 320<sup>D</sup> and MATH 301<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 410 - Machine Design**

Application of fundamental engineering principles to the design of various elements found in machines. Elements include connections, shafts, keys, couplings, springs, gears, belts, chains, bearings, clutches, brakes, screws, etc.

Prerequisite: MECH 310<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 411 - Mechanical Control Systems**

Introduction to theory of feedback and control. Performance and stability of linear systems. Design of feedback control systems. Practical application and introduction to state-space methods.

Prerequisites: ENGR 310<sup>D</sup> and MECH 410<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 412 - Finite Element Analysis**

Modern analysis techniques used to investigate a variety of systems in engineering and science. Computational models of problems are developed using energy concepts, structural mechanics, and matrix operations. The methods used are implemented using a general finite element program and the accuracy of the results is evaluated. The learned theoretical approach is applied to common structural elements such as trusses, beams, frames, and plates.

Prerequisite: ENGR 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 420 - Design and Manufacturing**

Manufacturing methods and operations. The interaction between design and manufacturing stressed in terms of drawing specifications versus process capability and tolerances, including standards applications and 1redesign for producibility.

Prerequisite: MECH 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 421 - Mechanical Vibrations**

Introduction to mechanical vibrations: single and multi-degree of freedom systems, free and forced vibrations, impedance and modal analysis including applications.

Prerequisites: MECH 410<sup>D</sup> and ENGR 240<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 422 - Thermal System Design**

Device design and system design of compressors, turbines, heat exchangers, piping systems, internal combustion engines, and other component equipment. Optimization including thermo-economic evaluation and energy analysis.

Prerequisite: MECH 340<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 423 - Additive Manufacturing**

Introduction to technologies and processes used to translate virtual solid model data into physical models for prototyping and end-use manufacturing applications. Discussion of design tools and design considerations for additively manufactured components.

Prerequisite: MECH 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 430 - Mechatronics**

Instrumentation and measurements emphasizing systems that combine electronics and mechanical components with modern controls and microprocessors. First and second order behavior, transducers and intermediate devices, measurement of rapidly changing engineering parameters, microcontrollers and actuators.

Prerequisite: MECH 330<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 431 - Introduction to Robotics**

Introduction to robots and their types. Homogeneous transformations. Kinematic equations and their solutions. Motion trajectories, statics, dynamics, and control of robots. Robot programming. Actuators, sensors and vision systems.

Prerequisites: ENGR 310<sup>D</sup> and MECH 330<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 440 - HVAC Systems**

The analysis and design of heating air conditioning systems. Topics include: psychometrics, comfort & health, heating and cooling loads, solar radiation, air distribution systems and refrigeration.

Prerequisites: MECH 340<sup>D</sup> and ENGR 301<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 441 - Sustainable Energy**

The technical, economic, environmental and physical resources constraints of energy sources are discussed in terms of both national and global development needs. The current states of both non-renewable and renewable technologies are presented in terms of their potential contribution to sustainable energy resources required for continued viable economic development.

Prerequisite: ENGR 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 460 - Capstone Design I**

Capstone Design course is the culmination of the educational experience in Mechanical Engineering. The courses require students to draw upon all previous coursework and cultivate new skills in order to solve complex design problems associated with an assigned group project. This is the first course of a year-long design experience.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment limited to students with department of Physics and Engineering.

**MECH 461 - Capstone Design II**

Capstone Design course is the culmination of the educational experience in Mechanical Engineering. The courses require students to draw upon all previous coursework and cultivate new skills in order to solve complex design problems associated with an assigned group project. This is the second course of a year-long design experience.

Prerequisite: MECH 460<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Mechanical Engineering.

Enrollment limited to students in the College of Engineering & Science college.

**MECH 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## PHYS Courses

**PHYS 101 - Concepts of Science I with Lab**

A descriptive and conceptual course in physics designed for the non-science major. Topics are selected from light, sound, motion, and astronomy to develop a necessary scientific attitude and background for today's society. There are two lectures and one-two hour laboratory per week.

Credits: 3

Term(s) Typically Offered: Offered Every Term

**PHYS 102 - Concepts of Science II**

A descriptive and conceptual course in physics designed for the non-science major to study energy systems. Topics are selected from heat, electricity, magnetism, and the structure of matter and modern areas of physics, such as lasers, X-rays, and nuclear energy. The purpose of the course is to develop a positive scientific attitude and background for today's society. No laboratory.

Credits: 3

**PHYS 103 - Investigating Matter and Energy/ Lab**

This is an activity-based and discussion-oriented course designed for the non-science major. The topics of light, matter, heat, and electricity have been selected to help students develop meaningful understanding of some powerful ideas that they can apply to a wide variety of interesting phenomena. Laboratory credit is given for taking this liberal studies enrichment course.

Credits: 3

**PHYS 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**PHYS 140 - Engineering Graphics I**

A beginning laboratory course in technological design and drawing. Topics: lettering, scales, geometric construction, orthographic sketching, and auxiliary views.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms Odd

**PHYS 141 - Engineering Graphics II**

An advanced laboratory course in technological drawing and implementation. Topics: Vectors, graphing, nomography, isometric pictorials, technical illustration, computer graphics, and working drawings.

Prerequisite: PHYS 140<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

**PHYS 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PHYS 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**PHYS 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed



**PHYS 201 - Elements of Physics I with Lab**

Introduction to physics at the algebra/trigonometry mathematical level. Topics include: mechanics, fluids, oscillations, waves, and sound. Course is especially designed for students enrolled in health science majors. This course must be taken with Elements of Physics Lab PHYS021.

Credits: 4

Term(s) Typically Offered: Offered Fall, Spring, & Summer  
Enrollment limited to students with department of Exercise & Rehabilitative Sci.

**PHYS 202 - Elements of Physics II/ Lab**

Introduction to physics at the algebra/trigonometry mathematical level. Topics include: thermal physics, optics, electricity and magnetism, and nuclear physics. Course is especially designed for health science majors. This course must be taken with Elements of Physics II Lab PHYS022.

Prerequisite: PHYS 201<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Spring & Summer Terms  
Enrollment limited to students with department of Exercise & Rehabilitative Sci.

**PHYS 204 - Environmental Biophysics**

An introductory course covering the energy problem and alternative solutions; radiation and its effects on man; the eye and vision; the ear, hearing and noise pollution; electrical power production alternatives and the environmental costs; some instruments used in biophysics and medicine.

Credits: 3

**PHYS 211 - General Physics I with Lab**

Introduction to physics using calculus and including extensive problem solving. Topics include mechanics statics, kinematics, kinetics, work-energy, rotational motion, and impulse-momentum. This course must be taken with General Physics Lab PHYS011.

Prerequisite: MATH 225 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Fall & Spring Terms

**PHYS 212 - General Physics II with Lab**

This is a calculus based course, which follows PHYS 211. It develops the concepts of electric and magnetic fields. Topics covered are Gauss' Law, Ampere's Law, Biot's Law, Faraday's Law, electric charges and their dynamics, capacitance, resistance inductance, etc. Offered fall semester only. Includes a lab.

Prerequisites: MATH 225<sup>D</sup> and PHYS 211<sup>D</sup> and MATH 230 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**PHYS 213 - General Physics III/ Lab**

Covers fluids, hydrostatics and hydro-dynamics, heat transfer and measurements, laws of thermodynamics, vibrating bodies, wave motion, light lenses and optical instruments, interference and diffraction, polarization. This course must be taken with General Physics III Lab PHYS023. Offered spring term only.

Prerequisite: PHYS 211<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Spring Terms

**PHYS 216 - University Physics 1 with Lab**

First of a two semester calculus based introduction to physics sequence for science, engineering, and mathematics students. Students will acquire knowledge of fundamental physics principles and their applications as well as problem solving skills and laboratory and data acquisition experience. Topics covered: kinematics, dynamics, momentum of particles and rigid bodies, work and energy, gravitation, simple harmonic motion, and waves. This course must be taken with University Physics 1 Lab.

Prerequisite: MATH 225 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

**PHYS 217 - University Physics 2 with Lab**

Second of a two semester calculus based introduction to physics sequence for science, engineering, and mathematics students. Students will acquire knowledge of fundamental physics principles and their applications as well as problem solving skills and laboratory and data acquisition experience. Topics Covered: Fluids, Thermodynamics, Electricity and Magnetism, Circuits, and Optics. This course must be taken with University Physics 2 Lab.

Prerequisites: PHYS 216<sup>D</sup> and MATH 230 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

**PHYS 271 - Astronomy**

This course is designed for the general student. Recent findings in astronomy are discussed, i.e., black holes, quasars, etc. Other topics of interest are the evolution of stars, galaxies, and the universe since the big bang. No math required.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Institutions & Human Innovations, Transfer Thread Completion Course

**PHYS 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PHYS 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**PHYS 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PHYS 301 - Physical Chemistry I**

Thermodynamics and chemical kinetics. Cross listed as CHEM301.

Prerequisites: CHEM 108<sup>D</sup> and CHEM 112<sup>D</sup> and (PHYS 212<sup>D</sup> or PHYS 213<sup>D</sup>) and MATH 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 312 - Modern Physics 1**

An introductory course that focuses on the transition from classical physics covered in the calculus based introductory physics sequence to contemporary physics. Topics include: Brief overview of special relativity, experimental and theoretical developments that led to the discovery of the atomic structure, early quantum mechanics, Schrodinger's equation and its application and a brief introduction to solid state physics.

Prerequisites: PHYS 212<sup>D</sup> and PHYS 213<sup>D</sup> and MATH 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 314 - Statics**

Includes the application of equilibrium conditions to structures, trusses, frames and machines, and beams with concentrated and distributed loads.

Prerequisites: PHYS 211<sup>D</sup> and MATH 230 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 315 - Dynamics**

Integrates the subject content of kinematics and kinetics that deal respectively with the description of motion of bodies and the causes for their motion.

Prerequisites: PHYS 314<sup>D</sup> and ENGR 210<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 317 - Space Science**

Introductory course in space exploration. It emphasizes the evolution of the earth with respect to its neighbors in the solar system. Other topics covered are the earth's ionosphere, magnetosphere, hazards of satellite communication, and orbital dynamics.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 325 - Analog & Digital Electronics**

An introductory analog and digital electronics course designed primarily for science students. The course will start with an analysis of AC and DC circuits using Kirchhoff's laws and complex numbers. The analog part will include a study of discrete components including diodes, transistors, and SCRs as well as linear integrated circuits. The digital part will include basic gates as well as MSI and LSI circuits and will be center around interfacing computers to experiments.

Prerequisite: PHYS 212<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 331 - Mathematical Methods of Physics**

Applications in physical science and engineering of the following: vector analysis, complex variables, Fourier and Laplace transforms, linear algebra, and some boundary value problems. Cross-linked as MATH 331. This course may be counted as a physics course or as a mathematics course, but not both.

Prerequisites: MATH 240<sup>D</sup> and PHYS 211<sup>D</sup> and MATH 231 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 371 - Physical Optics**

This is a physical optics course dealing with the nature and transmission of light. Topics covered will include the propagation of light, coherence, interference, diffraction, Maxwell's Equations, optics of solids, thermal radiation, optical spectra and lasers.

Prerequisites: PHYS 212<sup>D</sup> and PHYS 213<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 375 - Thermal Physics**

This is an introductory course in thermodynamics and statistical mechanics, with application to both physics and engineering.

Prerequisites: PHYS 213<sup>D</sup> and MATH 231<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 381 - Advanced Physics Laboratory**

Selected experiments in all branches of physics that are of a more advanced grade than those given at the general or intermediate level. Each experiment will be an extended piece of careful, thorough work, culminating in a detailed report.

Prerequisites: PHYS 211<sup>D</sup> and PHYS 212<sup>D</sup> and PHYS 213<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**PHYS 382 - Optics Laboratory**

This course will provide in depth experience in laboratory techniques, data acquisition and analysis in the field of Optical Physics. Experiments are of a more advanced grade than those given at the general or intermediate level. Each experiment will be an extended piece of careful, thorough work, culminating in a detailed report. Appropriate for students majoring in the Biological, Earth, Environmental, Health, Mathematics and Physical sciences.

Prerequisites: PHYS 211<sup>D</sup> and PHYS 212<sup>D</sup> and (PHYS 213<sup>D</sup> or PHYS 201<sup>D</sup>) and PHYS 202<sup>D</sup> and (MATH 225<sup>D</sup> or MATH 230<sup>D</sup> or MATH 231<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**PHYS 385 - Computational Physics**

An introduction to scientific computational methods and their application in physics. A range of numerical and symbolic computing techniques will be explored, including numerical integration, matrix methods, differential equations, random walks, and Monte Carlo simulations. These techniques together with visualization methods will be used to solve problems taken from different physics topics, such as classical mechanics, electricity and magnetism, thermodynamics, quantum mechanics, and biophysics.

Prerequisites: PHYS 213<sup>D</sup> and MATH 240<sup>D</sup> and CPSC 140<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 410 - Electricity and Magnetism**

Electric fields and potentials of charge distributions and polarized materials, magnetic fields and vector potentials of current distributions and magnetized materials; electric and magnetic energies and application of Maxwell's equations.

Prerequisites: PHYS 212<sup>D</sup> and PHYS 331<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 412 - Modern Physics 2**

This course explores the applications of Quantum mechanics and relativity. Topics covered will include atomic physics, quantum statistics, solid state physics, nuclear physics, astrophysics and cosmology.

Prerequisites: PHYS 312<sup>D</sup> and MATH 231<sup>D</sup> and PHYS 331 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 421 - Materials Safety and Equipment Overview for Nanofabrication - NMT 311**

This course provides an overview of basic nanofabrication processing equipment and materials handling procedures with a focus on safety, environment, and health issues. Topics covered include: cleanroom operation, environmental, safety, and health issues, vacuum pump systems operation, environmental safety and health issues (covering direct drive mechanical, roots blowers, turbomolecular, and dry mechanical systems); thermal- processing equipment operation, safety, environmental, and health issues (covering horizontal, vertical, rapid thermal annealing tools); chemical vapor deposition system operation, safety, environmental, and health issues (covering gas delivery, corrosive and flammable gas storage and plumbing, regulators, and mass flow controllers); and vacuum deposition/etching system operation, safety, environment, and health issues (covering microwave and RF power supplies and tuners, heating and cooling units, vacuum gauges, valves, and process controllers). Specific materials handling issues include those arising from using deionization water, solvents, cleansers, organic materials, ion implementation sources, diffusion sources, photoresists, developers, metal dielectrics and toxic, flammable, corrosive and high purity gases as well as packaging materials.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 422 - Basic Nanofabrication Processes - NMT 312**

The course provides an overview of basic processing steps used in all applications of nanofabrication. Both top-down and bottom-up nanofabrication are included. The majority of the course details a step-by-step description of the equipment and processes needed to fabricate devices and structures such as bio- chips, CMOS transistors, power devices, microelectromechanical (MEM) devices, and opto-electronic structures. Students learn the similarities and differences in both the equipment and process flows needed in fabricating all of these various structures.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 423 - Thin Films in Nanofabrication - NMT 313**

This course covers thin film deposition and etching practices in nanofabrication. The deposition techniques addressed in the first part of the course include atmospheric, low pressure, and plasma enhanced chemical vapor deposition and sputtering, thermal evaporation, and beam evaporation physical vapor deposition. Also included are self-assembling molecule based techniques. Materials considered include organics, dielectrics (e.g., nitrides, oxides), polysilicon (doped and undoped), metals (e.g., aluminum, tungsten, copper), adhesion promoters and diffusion barriers. The second part of the course focuses on etching processes and emphasizes reactive ion etching (single wafer, batch), high-ion-density reactors, ion beam etching and wet chemical etching. Students receive hands-on experience in depositing and etching dielectric, semiconductor, and metal materials using state-of-the-art tools and experience practicing the steps critical to micro- and nanofabrication of structures used in a variety of fields from biotechnology and the biomedical fields to microelectronics.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 424 - Advanced Lithography and Dielectrics Nanofabrication - NMT 314**

This course covers all aspects of lithography from design and mask fabrication to pattern transfer and inspection. The course is divided into three major sections. The first section describes the lithographic process from substrate preparation to exposure. The second section examines the processes from development through inspection (both before and after pattern transfer). This section introduces optical masks, aligners, steppers and scanners. In addition, critical dimension (CD) and profile control of photoresists are investigated. The last section discusses advances in optical lithographic techniques such as phase shifting masks and illumination schemes as well as molecular ruler, e-beam, x-ray, EUV, and ion beam lithography.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 425 - Materials Modification in Nanofabrication - NMT 315**

This course covers in detail the processing steps used in modifying material properties in nanofabrication. Included are chemical reaction, growth and annealing processes. The impact of thermal processing and thermal processing on defects, gettering, and impurities and overall electrical, mechanical, optical, and chemical properties are studied. The student grows and measures gate and field oxides, implants and activates source and drain regions, and evaluates thermal budget requirements using state-of-the-art tools. Included also are other modification technologies such as ion implantation, diffusion and chemical surface preparation and treatment. Substrate preparation processing such as slicing, etching, polishing and epitaxial growth are also covered.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 426 - Characterization, Packaging and Testing of Nanofabrication Structures - NMT 316**

This course examines a variety of measurements and techniques essential for controlling micro- and nanofabrication processes. Monitoring techniques such as residual gas analysis (RGA), optical emission spectroscopy (OES) and end point detection are discussed. Characterization techniques such as scanning electron microscopy x-ray photoelectron spectroscopy, atomic probe methods advanced optical microscopy, optical thin film measurements, ellipsometry, and resistivity/conductivity measurements are introduced and tied to process control. Basic measurements for yield analysis and process control are also stressed. These include breakdown measurements, junction testing, and capacitance-voltage and current voltage characterization. In addition, the characteristics of some simple bio-chip structures and MEMs devices are obtained and discussed. The student learns about the manufacturing issues involved in interconnects, materials compatibility and final device assembly. Aluminum, refractory metals and plastic fabrication techniques and characterization are discussed in detail along with topics such as diffusion barriers, contact resistance, electro migration, corrosion, and adhesion. The importance of planarization techniques such as deposition/etchback and chemical/mechanical polishing are emphasized. Lastly, procedures such as die separation, bonding, and sealing and final test for both conventional Cs and MEMs and biomedical devices are examined.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 450 - Internship**

Supervised placement and research in selected public and private agencies.

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

**PHYS 480 - Quantum**

In this introductory course in quantum mechanics, the foundations and origins will be covered. Other topics will include wave packets, the uncertainty principle, the Schroedinger equation, operator formalism, eigen functions, spherically symmetric systems, angular momentum, spin and scattering theory.

Prerequisites: PHYS 331<sup>D</sup> and PHYS 411<sup>D</sup> and MATH 240<sup>D</sup> and MATH 301<sup>\*D</sup> (may be taken concurrently).

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 490 - Independent Study**

Investigation of the theoretical or experimental area following a plan or proposal initiated by the student and approved by the major advisor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE Courses****PNGE 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**PNGE 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PNGE 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**PNGE 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed



**PNGE 201 - Introduction to Petroleum and Natural Gas Engineering**

This course provides an overview of different aspects of petroleum and natural gas engineering from generation to exploration of petroleum reservoirs to drilling and production from these resources.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

**PNGE 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PNGE 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**PNGE 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PNGE 312 - Petrophysics**

This course provides an in depth review of the properties of the reservoir rock and fluids. Topics covered will include theoretical and applied phase behavior of hydrocarbon systems and hydrocarbon fluid properties, basic properties of petroleum reservoir rocks and laboratory evaluation of basic and special petroleum reservoir rock and fluid properties.

Prerequisites: CHEM 107<sup>D</sup> and CHEM 111<sup>D</sup> and PNGE 201<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 315 - Reservoir Fluids**

Thermodynamic behavior of naturally occurring hydrocarbon mixtures; evaluation and correlation of physical properties of petroleum reservoir fluids including laboratory and empirical methods.

Prerequisites: PNGE 312<sup>D</sup> and CHEM 108<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 325 - Reservoir Engineering**

This course provides an in depth review of reservoir characteristics and behavior. Topics covered will include fluid flow through porous materials, evaluation of oil and gas resources and the reserves under a variety of production methods, and prediction of reservoir performance to achieve maximum conservation.

Prerequisites: EGEO 327<sup>D</sup> and PNGE 315<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 330 - Unconventional Reservoir Engineering**

This course addresses topics that are specific to exploration of unconventional reservoirs - identification and characterization, economics, efficient completion technologies and development strategies. Tight gas and shale gas reservoirs and coal bed methane engineering are addressed.

Prerequisite: PNGE 325<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 410 - Drilling engineering with Lab**

This course provides an in depth review of drilling engineering practices. Topics covered will include functions and design considerations for the rotating system, hoisting system and circulating system; drilling fluids calculations and selections; hydraulic programs; drilling optimization; casing string design; cementing programs; and pressure control; laboratory evaluation of mud weight control filtration, chemical contaminants and rheological models.

Prerequisites: ENGR 301 (may be taken concurrently)<sup>D</sup> and PNGE 312<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 420 - Production Engineering**

This course provides an in depth review of petroleum production engineering practices. Topics covered will include well completion, performance of productive formations, drill stem tests, completion of wells, flowing wells, gas lift methods and equipment, pumping installation design, well stimulation, emulsion, treating, gathering and storage of oil and gas, field automation.

Prerequisites: PNGE 410 (may be taken concurrently)<sup>D</sup> and PNGE 325<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 430 - Reservoir Simulation**

Mathematical models governing fluid flow in reservoirs; relevant numerical methods; numerical reservoir simulations; treatment of wells; history matching; simulation project performed using a commercial simulator.

Prerequisites: CPSC 146<sup>D</sup> and (MATH 309<sup>D</sup> or MATH 232<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 432 - Formation Evaluation**

This course provides an in depth review of techniques for formation evaluation. Topics covered will include various well logging methods and related calculations with exercises in interpretation of data from actual well logs.

Prerequisite: PNGE 312<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 435 - Pressure Transient Analysis**

This course provides an in depth review of the well test analysis methods.

Topics covered will include pressure transient tests and interpretation methods, unsteady-state fluid flow through porous rock, analysis of the drawdown and buildup tests, wellbore storage, application of pressure derivative in pressure transient data analysis, testing of hydraulically fractured wells, type curve method, testing of horizontal wells, unified method of analysis, well test design.

Prerequisite: PNGE 420<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 440 - Hydraulic Fracturing**

This course starts with a general overview of different types of unconventional reservoirs and their geological and petrophysical properties. Second part of the course emphasizes hydraulic fracturing design and data collection for proper fracture design. Economic analysis of hydraulic fracturing will be covered as well as more advanced topics such as completion design optimization.

Prerequisite: PNGE 325<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 441 - Oil and Natural Gas Resource Valuation and Economics**

This course provides an in depth review of the techniques for oil and gas property evaluation. Topics covered will include reserve estimation, decline analysis, petroleum property evaluation, interest calculations, cost estimation, and tax evaluation, investment decision analysis and computer applications in property evaluation.

Prerequisites: PNGE 325<sup>D</sup> and PNGE 432<sup>\*D</sup> (may be taken concurrently).

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 443 - Enhanced Oil Recovery**

This course teaches an integrated version of the basics of waterflooding and enhanced oil recovery (EOR), illustrating the connection of each process to a few fundamental principles. It reviews the specifics of thermal and solvent EOR by relating basic principles to the results of cases from the field.

Prerequisite: PNGE 325<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Petro & Natl Gas Engineering.

Enrollment limited to students in the College of Engineering & Scien college.

**PNGE 445 - Natural Gas Engineering with Lab**

This course provides an in depth review of natural gas evaluation and production engineering practices. Topics covered will include natural gas properties, compression, transmission, processing and application of reservoir engineering principles to predict the performance and design of gas, gas-condensate and storage reservoirs. Includes a laboratory devoted to gas measurements.

Prerequisite: PNGE 325<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 450 - Internship**

Supervised placement and research in selected public and private agencies.

Credits: 3-9

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 459 - Petroleum and Natural Gas Design/Capstone I**

This course provides a proposal preparation for PNGE 460 which includes defining a comprehensive problem in design involving systems in oil and gas production, field processing, transportation, and storage.

Prerequisites: PNGE 325<sup>D</sup> and PNGE 410<sup>D</sup> and PNGE 420<sup>\*D</sup> and PNGE 432<sup>\*D</sup> (may be taken concurrently).

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 460 - Petroleum and Natural Gas Engineering Design/Capstone II**

This course provides comprehensive problems in design involving systems in oil and gas production, field processing, transportation and storage.

Prerequisite: PNGE 459<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 470 - Petroleum and Natural Gas Engineering Undergraduate Research**

Research and design problems of limited scope approved on an individual basis intended to promote independent inquiry.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**PNGE 490 - Independent Study**

Investigation of the theoretical or experimental area following a plan or proposal initiated by the student and approved by the major advisor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Civil Engineering, Bachelor of Science (BS)

### Program Learning Outcomes

#### Student Outcomes

Upon graduation, students will have:

- An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
- An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
- An ability to communicate effectively with a range of audiences
- An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
- An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
- An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
- An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

## Related Links

Civil Engineering, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/civil-engineering/>)

Physics and Engineering Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/physics-and-engineering/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.00 or higher

Overall GPA: 2.00 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	41
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	84
	Natural Science and Math College-Wide Requirements	12
	Elective	3

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 225	Calculus I	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16

#### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
<i>Physical Sciences Inquiry</i>		
PHYS 216	University Physics 1 with Lab	4
Subtotal		17

#### Additional Rock Studies Requirements

Required Thematic Thread Coursework:

MATH 230	Calculus II	4
PHYS 217	University Physics 2 with Lab	4
Subtotal		8
<b>Total Hours</b>		<b>41</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

### Major/Concentration Requirements

- 42 major credits must be taken at SRU or PASSHE
- 42 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Engineering Courses</b>		
ENGR 110	Introduction to Engineering <sup>1</sup>	2
ENGR 120	Engineering Design Tools <sup>1</sup>	2
ENGR 130	Engineering Computing Tools <sup>1</sup>	2
ENGR 210	Statics <sup>1</sup>	3
ENGR 220	Engineering Materials <sup>1</sup>	3
ENGR 230	Mechanics of Materials	3
ENGR 231	Mechanics of Materials Lab	1
ENGR 301	Fluid Mechanics <sup>1</sup>	3
ENGR 340	Engineering Economics <sup>1</sup>	3
CIVL 210	Elementary Survey <sup>1</sup>	3
CIVL 310	Structural Engineering <sup>1</sup>	4

CIVL 320	Transportation Engineering <sup>1</sup>	3
CIVL 330	Environmental Engineering <sup>1</sup>	4
CIVL 340	Geotechnical Engineering <sup>1</sup>	3
CIVL 350	Water Resources Engineering <sup>1</sup>	3
CIVL 410	Structural Steel Design <sup>1</sup>	3
CIVL 411	Reinforced Concrete Design	3
CIVL 420	Traffic Engineering <sup>1</sup>	3
CIVL 430	Storm Water Management <sup>1</sup>	3
CIVL 440	Construction Management	3
CIVL 460	Capstone Design I <sup>1</sup>	3
CIVL 461	Capstone Design II	3
Subtotal		63
<b>Engineering Elective</b>		
Select one of the following:		3
ENGR 240	Dynamics	
ENGR 310	Introduction to Electrical Engineering	
ENGR 320	Thermodynamics	
<b>Civil Engineering Electives - 400 Level</b>		
Select two of the following:		6
CIVL 412	Finite Element Analysis	
CIVL 421	Highway Engineering	
CIVL 422	Transportation Terminal Design	
CIVL 431	Environmental Engineering Design	
CIVL 432	Groundwater Hydrology	
CIVL 441	Sustainable Development	
<b>Required Math and Science Courses</b>		
BIOL 105	Environmental Biology	3
MATH 232	Linear Algebra	3
MATH 301	Differential Equations I	3
STAT 350	Applied Statistics	3
Subtotal		21
<b>Total Hours</b>		<b>84</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## FREE ELECTIVE

Code	Title	Hours
Select three credits		3
<b>Total Hours</b>		<b>3</b>

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
CHEM 107	General Chemistry I <sup>1</sup>	3
CHEM 111	General Chemistry I Lab <sup>1</sup>	1
MATH 225	Calculus I <sup>1</sup>	4
PHYS 216	University Physics 1 with Lab	4
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

CIVIL ENGINEERING - BS (6183)

This program is effective as of Fall 2021

Revised 3.31.2022

UCC 10.26.2021

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGR 110	Introduction to Engineering	2
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
ENGL 102	Critical Writing	3
ESAP 101	FIRST Seminar *	1
MATH 225	Calculus I	4
SUBJ 139	Foundations of Academic Discovery <sup>2</sup>	3
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
ENGR 120	Engineering Design Tools	2
ENGL 104	Critical Reading	3
MATH 230	Calculus II	4
PHYS 211	General Physics I with Lab	4
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
ENGR 130	Engineering Computing Tools	2
BIOL 105	Environmental Biology	3
MATH 301	Differential Equations I	3
ENGR 210	Statics	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Social Science Inquiry (p. 29)		3
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
ENGR 220	Engineering Materials	3
ENGR 230	Mechanics of Materials	3
STAT 350	Applied Statistics	3
MATH 232	Linear Algebra	3



PHYS 213	General Physics III/ Lab	4
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
CIVL 210	Elementary Survey	3
CIVL 310	Structural Engineering	4
CIVL 320	Transportation Engineering	3
CIVL 340	Geotechnical Engineering	3
ENGR 301	Fluid Mechanics	3
ENGR 231	Mechanics of Materials Lab	1
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
ENGR xxx	Engineering Elective	3
CIVL 330	Environmental Engineering	4
CIVL 350	Water Resources Engineering	3
CIVL 420	Traffic Engineering	3
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Fourth Year</b>		
<b>Fall</b>		
CIVL 410	Structural Steel Design	3
CIVL 411	Reinforced Concrete Design	3
CIVL 430	Storm Water Management	3
CIVL 460	Capstone Design I	3
ENGR 340	Engineering Economics	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
CIVL 440	Construction Management	3
CIVL 461	Capstone Design II	3
CIVL 4xx	Civil Engineering Elective	3
CIVL 4xx	Civil Engineering Elective	3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>129</b>

<sup>1</sup> Recommended: ECON 201 Macroeconomics

<sup>2</sup> Course offered in multiple subjects; cannot take course in first major subject.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6183  
Revised: 08.04.2021

## Industrial and Systems Engineering, Bachelor of Science (BS)

### Program Learning Outcomes

#### Student Outcomes

Upon graduation, students will have:

- An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
- An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
- An ability to communicate effectively with a range of audiences
- An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
- An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
- An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
- An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

### Related Links

Industrial and Systems Engineering, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/industrial-and-systems-engineering/>)

Physics and Engineering Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/physics-and-engineering/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

### Curriculum Guide

#### GPA Requirement

Major GPA: 2.00 or higher

Overall GPA: 2.00 or higher

#### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	41
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	84
	Natural Science and Math College-Wide Requirements	12
	Elective	3

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 225	Calculus I	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
<i>Physical Sciences Inquiry</i>		
PHYS 216	University Physics 1 with Lab	4
Subtotal		17
<b>Additional Rock Studies 2 Requirements</b>		
Required Thematic Thread Coursework:		
MATH 230	Calculus II	4
PHYS 217	University Physics 2 with Lab	4
Subtotal		8
<b>Total Hours</b>		<b>41</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		

Select one of the following at SRU or another post-secondary institution:

CPSC 100	Introduction to Computing for Liberal Arts
CPSC 110	Computer Concepts
CPSC 130	Introduction to Computing and Programming
PE 202	Technology for Wellness

**Total Hours** **0-3**

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 44 major credits must be taken at SRU or PASSHE
- 44 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Engineering Courses</b>		
ENGR 110	Introduction to Engineering <sup>1</sup>	2
ENGR 120	Engineering Design Tools <sup>1</sup>	2
ENGR 130	Engineering Computing Tools <sup>1</sup>	2
ENGR 210	Statics <sup>1</sup>	3
ENGR 220	Engineering Materials <sup>1</sup>	3
ENGR 310	Introduction to Electrical Engineering <sup>1</sup>	3
ENGR 340	Engineering Economics <sup>1</sup>	3
ISE 311	Introduction to Operations Research <sup>1</sup>	3
ISE 362	Lean Systems <sup>1</sup>	3
ISE 370	Design of Industrial Systems and Processes <sup>1</sup>	3
ISE 372	Manufacturing Systems Design and Analysis <sup>1</sup>	3
ISE 373	Quality Engineering <sup>1</sup>	3
ISE 402	Work Design <sup>1</sup>	3
ISE 410	Engineering Project Management <sup>1</sup>	3
ISE 420	Simulation of Industrial Systems <sup>1</sup>	4
ISE 421	Supply Chain & Logistics Engineering <sup>1</sup>	3
ISE 430	Production Planning & Control <sup>1</sup>	3
ISE 440	Health Care Systems Engineering <sup>1</sup>	3
ISE 442	Human Factors Engineering <sup>1</sup>	3
ISE 460	Engineering Risk Analysis <sup>1</sup>	3
ISE 487	Industrial and Systems Engineering Senior Project I <sup>1</sup>	1
ISE 488	Senior Project II <sup>1</sup>	3
MECH 330	Introduction to Mechatronics <sup>1</sup>	4
Subtotal		66
<b>ISE Electives</b>		
Select three of the following:		8
ISE 330	Six Sigma Methodology	
ISE 382	Sustainable Processes	
ISE 432	Productivity Analysis	
ISE 480	Industrial and Systems Engineering Undergraduate Research	

MATH 316	Advanced Methods of Operations Research	
Subtotal		8
<b>Required Math and Science Courses</b>		
MATH 231	Calculus III <sup>1</sup>	4
MATH 232	Linear Algebra <sup>1</sup>	3
STAT 350	Applied Statistics <sup>1</sup>	3
Subtotal		10
<b>Total Hours</b>		<b>84</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## free elective

Code	Title	Hours
Select three credits		3
<b>Total Hours</b>		<b>3</b>

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
CHEM 107	General Chemistry I <sup>1</sup>	3
CHEM 111	General Chemistry I Lab <sup>1</sup>	1
MATH 225	Calculus I <sup>1</sup>	4
PHYS 216	University Physics 1 with Lab	4
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

INDUSTRIAL AND SYSTEMS ENGINEERING - BS (6182)

This program is effective as of Summer 2021

Revised 3.31.2022

UCC 10.26.2021

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
MATH 225	Calculus I	4
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4

ENGR 110	Introduction to Engineering	2
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>17</b>

### Spring

MATH 230	Calculus II	4
PHYS 211	General Physics I with Lab	4
ENGR 120	Engineering Design Tools	2
ENGL 104	Critical Reading	3
Social Science Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>

### Second Year

#### Fall

MATH 231	Calculus III	4
PHYS 213	General Physics III/ Lab	4
ENGR 130	Engineering Computing Tools	2
ENGR 210	Statics	3
ENGR 340	Engineering Economics	3
<b>Hours</b>		<b>16</b>

#### Spring

MATH 232	Linear Algebra	3
PHYS 212	General Physics II with Lab	3
STAT 350	Applied Statistics	3
ENGR 310	Introduction to Electrical Engineering	3
ENGR 220	Engineering Materials	3
<b>Hours</b>		<b>15</b>

### Third Year

#### Fall

ISE 311	Introduction to Operations Research	3
ISE 372	Manufacturing Systems Design and Analysis	3
ISE 373	Quality Engineering	3
ISE 402	Work Design	3
MECH 330	Introduction to Mechatronics	4
<b>Hours</b>		<b>16</b>

#### Spring

ISE 370	Design of Industrial Systems and Processes	3
ISE 420	Simulation of Industrial Systems	4
ISE 421	Supply Chain & Logistics Engineering	3
ISE 430	Production Planning & Control	3
ISE 440	Health Care Systems Engineering	3
<b>Hours</b>		<b>16</b>

### Fourth Year

#### Fall

ISE 442	Human Factors Engineering	3
ISE 410	Engineering Project Management	3
ISE 487	Industrial and Systems Engineering Senior Project I	1
ISE Elective		3
Creative & Aesthetic Inquiry (p. 29)		3

Humanities Inquiry (p. 29)	3
<b>Hours</b>	<b>16</b>
<b>Spring</b>	
ISE 362 Lean Systems	3
ISE 488 Senior Project II	3
ISE Elective	2
ISE 460 Engineering Risk Analysis	3
Free Elective	3
Select one of the following:	3
COMM 200 Civil Discourse: Theory & Practice	
PHIL 110 Ethics and Civil Discourse	
POLS 235 Civil Discourse and Democracy	
<b>Hours</b>	<b>17</b>
<b>Total Hours**</b>	<b>129</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

\* Students are encouraged to take ESAP 101 as a Free Elective.

Major Code: 6182  
Revised: 06.07.2021

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

## Mechanical Engineering, Bachelor of Science (BS)

### Program Learning Outcomes Student Outcomes

Upon graduation, students will have:

- An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
- An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
- An ability to communicate effectively with a range of audiences
- An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
- An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
- An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
- An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

## Related Links

Mechanical Engineering, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/mechanical-engineering/>)

Physics and Engineering Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/physics-and-engineering/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.00 or higher  
Overall GPA: 2.00 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	41
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	84
	Natural Science and Math College-Wide Requirements	12
	Elective	3

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
	<b>The Rock</b>	
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 225	Calculus I	4
	Select one of the following:	3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
	<b>Subtotal</b>	<b>16</b>

#### Integrated Inquiry

	<i>Creative and Aesthetic Inquiry</i>	
	Select 3 Credits (p. 29)	3
	<i>Humanities Inquiry</i>	
	Select 3 Credits (p. 29)	3
	<i>Social Science Inquiry</i>	
	Select 3 Credits (p. 29)	3
	<i>Natural Sciences Inquiry</i>	
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
	<i>Physical Sciences Inquiry</i>	
PHYS 216	University Physics 1 with Lab	4
	<b>Subtotal</b>	<b>17</b>
	<b>Additional Rock Studies 2 Requirements</b>	

Required Thematic Thread Coursework:		
MATH 230	Calculus II	4
PHYS 217	University Physics 2 with Lab	4
Subtotal		8
<b>Total Hours</b>		<b>41</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- 42 major credits must be taken at SRU or PASSHE
- 42 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Engineering Courses</b>		
ENGR 110	Introduction to Engineering <sup>1</sup>	2
ENGR 120	Engineering Design Tools <sup>1</sup>	2
ENGR 130	Engineering Computing Tools <sup>1</sup>	2
ENGR 210	Statics <sup>1</sup>	3
ENGR 220	Engineering Materials <sup>1</sup>	3
ENGR 230	Mechanics of Materials <sup>1</sup>	3
ENGR 231	Mechanics of Materials Lab <sup>1</sup>	1
ENGR 240	Dynamics <sup>1</sup>	3
ENGR 301	Fluid Mechanics <sup>1</sup>	3
ENGR 310	Introduction to Electrical Engineering <sup>1</sup>	3
ENGR 320	Thermodynamics <sup>1</sup>	3

ENGR 340	Engineering Economics <sup>1</sup>	3
MECH 310	Machines and Mechanisms <sup>1</sup>	4
MECH 320	Manufacturing Processes <sup>1</sup>	3
MECH 330	Introduction to Mechatronics <sup>1</sup>	4
MECH 340	Heat Transfer <sup>1</sup>	4
MECH 410	Machine Design <sup>1</sup>	4
MECH 420	Design and Manufacturing <sup>1</sup>	3
MECH 430	Mechatronics <sup>1</sup>	3
MECH 460	Capstone Design I <sup>1</sup>	3
MECH 461	Capstone Design II <sup>1</sup>	3
Subtotal		62

### Mechanical Engineering Electives

Select three of the following:		9
MECH 411	Mechanical Control Systems	
MECH 412	Finite Element Analysis	
MECH 421	Mechanical Vibrations	
MECH 422	Thermal System Design	
MECH 423	Additive Manufacturing	
MECH 431	Introduction to Robotics	
MECH 440	HVAC Systems	
MECH 441	Sustainable Energy	

### Required Math and Science Courses

MATH 231	Calculus III <sup>1</sup>	4
MATH 232	Linear Algebra <sup>1</sup>	3
MATH 301	Differential Equations I <sup>1</sup>	3
STAT 350	Applied Statistics <sup>1</sup>	3
Subtotal		22
<b>Total Hours</b>		<b>84</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## FREE ELECTIVE

Code	Title	Hours
Select three credits		3
<b>Total Hours</b>		<b>3</b>

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
CHEM 107	General Chemistry I <sup>1</sup>	3
CHEM 111	General Chemistry I Lab <sup>1</sup>	1
MATH 225	Calculus I <sup>1</sup>	4
PHYS 216	University Physics 1 with Lab	4
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-



earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MECHANICAL ENGINEERING - BS (6184)

This program is effective as of Fall 2019.

Revised 03.31.2022

UCC 10.26.2021

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGR 110	Introduction to Engineering	2
ENGL 102	Critical Writing	3
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
MATH 225	Calculus I	4
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ESAP 101	FYRST Seminar *	1
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
ENGR 120	Engineering Design Tools	2
ENGL 104	Critical Reading	3
MATH 230	Calculus II	4
PHYS 211	General Physics I with Lab	4
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
ENGR 130	Engineering Computing Tools	2
ENGR 210	Statics	3
MATH 231	Calculus III	4
MATH 232	Linear Algebra	3
PHYS 212	General Physics II with Lab	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ENGR 220	Engineering Materials	3
ENGR 230	Mechanics of Materials	3
ENGR 240	Dynamics	3
ENGR 310	Introduction to Electrical Engineering	3
PHYS 213	General Physics III/ Lab	4
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
MECH 310	Machines and Mechanisms	4
MECH 330	Introduction to Mechatronics	4
ENGR 231	Mechanics of Materials Lab	1
ENGR 301	Fluid Mechanics	3

ENGR 320	Thermodynamics	3
MATH 301	Differential Equations I	3
<b>Hours</b>		<b>18</b>
<b>Spring</b>		
MECH 320	Manufacturing Processes	3
MECH 340	Heat Transfer	4
MECH 410	Machine Design	4
MECH 430	Mechatronics	3
STAT 350	Applied Statistics	3
<b>Hours</b>		<b>17</b>
<b>Fourth Year</b>		
<b>Fall</b>		
MECH 420	Design and Manufacturing	3
MECH 460	Capstone Design I	3
MECH 4XX	Mechanical Engineering Elective	3
ECON 201	Principles of Macroeconomics	3
ENGR 340	Engineering Economics	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
MECH 460	Capstone Design I	3
MECH 4XX	Mechanical Engineering Elective	6
PHIL 123	Ethics	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>129</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major: 6184

Revised: 11.18.2020

## Petroleum and Natural Gas Engineering, Bachelor of Science (BS)

### Program Learning Outcomes

#### Student Outcomes

Upon graduation, students will have:

- An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics

- An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
- An ability to communicate effectively with a range of audiences
- An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
- An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
- An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
- An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

## Related Links

Petroleum and Natural Gas Engineering, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/petroleum-and-natural-gas-engineering/>)

Physics and Engineering Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/physics-and-engineering/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	41
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	84
	Natural Science and Math College-Wide Requirements	12
	Elective	3

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 225	Calculus I	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	

PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
<i>Physical Sciences Inquiry</i>		
PHYS 216	University Physics 1 with Lab	4
Subtotal		17
<b>Additional Rock Studies 2 Requirements</b>		
Required Thematic Thread Coursework:		
MATH 230	Calculus II	4
PHYS 217	University Physics 2 with Lab	4
Subtotal		8
<b>Total Hours</b>		<b>41</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this

requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 42 major credits must be taken at SRU or PASSHE
- 42 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Engineering Courses</b>		
ENGR 110	Introduction to Engineering <sup>1</sup>	2
ENGR 120	Engineering Design Tools <sup>1</sup>	2
ENGR 130	Engineering Computing Tools	2
ENGR 210	Statics	3
ENGR 230	Mechanics of Materials	3
ENGR 301	Fluid Mechanics <sup>1</sup>	3
ENGR 320	Thermodynamics <sup>1</sup>	3
ENGR 340	Engineering Economics	3
PNGE 201	Introduction to Petroleum and Natural Gas Engineering <sup>1</sup>	1
PNGE 312	Petrophysics <sup>1</sup>	4
PNGE 315	Reservoir Fluids <sup>1</sup>	3
PNGE 325	Reservoir Engineering <sup>1</sup>	3
PNGE 410	Drilling engineering with Lab <sup>1</sup>	4
PNGE 420	Production Engineering <sup>1</sup>	3
PNGE 430	Reservoir Simulation <sup>1</sup>	3
PNGE 432	Formation Evaluation <sup>1</sup>	3
PNGE 435	Pressure Transient Analysis <sup>1</sup>	3
PNGE 440	Hydraulic Fracturing <sup>1</sup>	3
PNGE 441	Oil and Natural Gas Resource Valuation and Economics <sup>1</sup>	3
PNGE 459	Petroleum and Natural Gas Design/Capstone I <sup>1</sup>	1
PNGE 460	Petroleum and Natural Gas Engineering Design/Capstone II <sup>1</sup>	2
Subtotal		57
<b>PNGE Electives (PNGE or EGEO)</b>		
Students must select two of the following courses, a minimum of six credits:		6
PNGE 330	Unconventional Reservoir Engineering <sup>1</sup>	
PNGE 443	Enhanced Oil Recovery <sup>1</sup>	
PNGE 445	Natural Gas Engineering with Lab <sup>1</sup>	
PNGE 470	Petroleum and Natural Gas Engineering Undergraduate Research <sup>1</sup>	
EGEO 358	Introduction to Geophysics/Lab <sup>1</sup>	
Subtotal		6
<b>Required Math and Science Courses</b>		
CHEM 108	General Chemistry II <sup>1</sup>	3
CHEM 112	General Chemistry II Lab <sup>1</sup>	1
EGEO 201	Earth Materials and Processes/Lab <sup>1</sup>	4
EGEO 327	Structural Geology <sup>1</sup>	4
MATH 232	Linear Algebra <sup>1</sup>	3
MATH 301	Differential Equations I <sup>1</sup>	3
STAT 350	Applied Statistics	3

Subtotal	21
<b>Total Hours</b>	<b>84</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
CHEM 107	General Chemistry I <sup>1</sup>	3
CHEM 111	General Chemistry I Lab <sup>1</sup>	1
MATH 225	Calculus I <sup>1</sup>	4
PHYS 216	University Physics 1 with Lab <sup>1</sup>	4
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

PETROLEUM AND NATURAL GAS ENGINEERING - BS (6180)

This program is effective as of Summer 2021

Revised 3.31.2022

UCC 10.26.2021

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGR 110	Introduction to Engineering	2
ENGL 102	Critical Writing	3
MATH 225	Calculus I	4
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
ENGR 120	Engineering Design Tools	2
ENGL 104	Critical Reading	3
MATH 230	Calculus II	4
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4

PHYS 211	General Physics I with Lab	4
<b>Hours</b>		<b>17</b>

**Second Year****Fall**

ENGR 130	Engineering Computing Tools	2
ENGR 210	Statics	3
PNGE 201	Introduction to Petroleum and Natural Gas Engineering	1
PHYS 212	General Physics II with Lab	3
EGEO 201	Earth Materials and Processes/Lab	4
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>

**Spring**

PHYS 213	General Physics III/ Lab	4
ENGR 230	Mechanics of Materials	3
PNGE 312	Petrophysics	4
MATH 301	Differential Equations I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
<b>Hours</b>		<b>17</b>

**Third Year****Fall**

ENGR 301	Fluid Mechanics	3
PNGE 315	Reservoir Fluids	3
ENGR 320	Thermodynamics	3
PNGE 410	Drilling engineering with Lab	4
EGEO 327	Structural Geology	4
<b>Hours</b>		<b>17</b>

**Spring**

PNGE 325	Reservoir Engineering	3
PNGE 432	Formation Evaluation	3
MATH 232	Linear Algebra	3
STAT 350	Applied Statistics	3
Social Science Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>

**Fourth Year****Fall**

ENGR 340	Engineering Economics	3
PNGE 420	Production Engineering	3
PNGE 430	Reservoir Simulation	3
PNGE 440	Hydraulic Fracturing	3
PNGE 441	Oil and Natural Gas Resource Valuation and Economics	3
PNGE 459	Petroleum and Natural Gas Design/Capstone I	1
<b>Hours</b>		<b>16</b>

**Spring**

PNGE 435	Pressure Transient Analysis	3
PNGE 460	Petroleum and Natural Gas Engineering Design/Capstone II	2
PNGE Elective <sup>1</sup>		3

Creative & Aesthetic Inquiry (p. 29)	3
Free Elective	3
<b>Hours</b>	<b>14</b>
<b>Total Hours**</b>	<b>129</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* Select PNGE Elective from: PNGE 470, EGEO 358, PNGE 445, or PNGE 330.

Major Code: 6180

Revised: 06.07.2021

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

## Physics, Bachelor of Arts (BA)

### Program Learning Outcomes

Upon graduation, students in the Physics Program at SRU will be:

- Proficient in the basic and advanced concepts of classical and modern physics.
- Accomplished problem solvers capable of applying inductive and deductive logic, mathematical modeling, computational tools, and principles of physics to novel situations.
- Skilled at constructing and assembling experimental apparatuses, conducting and analyzing measurements of physical phenomena, and drawing valid conclusions from experimental data.
- Effective communicators, capable of presenting scientific results effectively to diverse audiences.
- Prepared for a career in science, industry, and education or to pursue a graduate program in physics or related areas.

### Related Links

Physics, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/physics/>)

Physics and Engineering Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/physics-and-engineering/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

### Curriculum Guide

#### GPA Requirement

Major GPA: 2.00 or higher

Overall GPA: 2.00 or higher

#### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Modern Language Requirements	0-9

Other Basic Requirements	0-3
Computer Competency	0-3
Major Requirements	39
Natural Science and Math College-Wide Requirements	12
Electives	36

\* All undergraduate degree programs require a minimum of 120 credits.  
Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 225	Calculus I	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
<i>Physical Sciences Inquiry</i>		
PHYS 211	General Physics I with Lab	4
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>45</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.  
<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
Complete 0-9 credits		0-9
<b>Total Hours</b>		<b>0-9</b>

Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

Major Requirements

- 20 major credits must be taken at SRU or PASSHE
- 20 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Physics Courses</b>		
PHYS 212	General Physics II with Lab <sup>1</sup>	3
PHYS 213	General Physics III/ Lab <sup>1</sup>	4
PHYS 312	Modern Physics 1 <sup>1</sup>	3
PHYS 314	Statics <sup>1</sup>	3
Select one of the following:		3
PHYS 331	Mathematical Methods of Physics <sup>1</sup>	
MATH 331	Mathematical Methods of Physics <sup>1</sup>	
Select one of the following:		2
PHYS 381	Advanced Physics Laboratory <sup>1</sup>	
PHYS 382	Optics Laboratory <sup>1</sup>	
PHYS 412	Modern Physics 2 <sup>1</sup>	1
Subtotal		19
<b>Required Physics Electives</b>		
Select two of the following:		6
PHYS 315	Dynamics <sup>1</sup>	
PHYS 375	Thermal Physics <sup>1</sup>	
PHYS 385	Computational Physics <sup>1</sup>	
PHYS 410	Electricity and Magnetism <sup>1</sup>	
PHYS 480	Quantum <sup>1</sup>	



Subtotal	6
<b>Related Field Work</b>	
CPSC 146      Programming Principles <sup>1</sup>	3
MATH 230      Calculus II <sup>1,2</sup>	4
MATH 231      Calculus III <sup>1</sup>	4
MATH 240      Linear Algebra and Differential Equations <sup>1</sup>	3
Subtotal	14
<b>Total Hours</b>	<b>39</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
Students must take the following four courses:		
CHEM 107	General Chemistry I <sup>1</sup>	3
CHEM 111	General Chemistry I Lab <sup>1</sup>	1
MATH 225	Calculus I <sup>1</sup>	4
PHYS 211	General Physics I with Lab <sup>1</sup>	4
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

PHYSICS - BA (6 64)

This program is effective as of Fall 2019.

Revised 07-2019

UCC 2.5.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
MATH 225	Calculus I	4
PHYS 211	General Physics I with Lab	4
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ESAP 101	FIRST Seminar *	1
<b>Hours</b>		<b>15</b>

<b>Spring</b>		
ENGL 104	Critical Reading	3
PHYS 213	General Physics III/ Lab	4
MATH 230	Calculus II	4
RSP		3
<b>Hours</b>		<b>14</b>

### Second Year

<b>Fall</b>		
Civil Discourse		3
MATH 231	Calculus III	4
PHYS 213	General Physics III/ Lab	4
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
Free Elective		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>18</b>

<b>Spring</b>		
RSP		3
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
MATH 240	Linear Algebra and Differential Equations	3
CPSC 146	Programming Principles	3
Free Elective		3
<b>Hours</b>		<b>16</b>

### Third Year

<b>Fall</b>		
PHYS 314	Statics	3
RSP		3
PHYS 312	Modern Physics 1	3
RSP		3
Free Elective		3
<b>Hours</b>		<b>15</b>

<b>Spring</b>		
Free Elective		3
Physics Elective		3
Free Elective		3
RSP		3
PHYS 412	Modern Physics 2	1
Free Elective		3
<b>Hours</b>		<b>16</b>

### Fourth Year

<b>Fall</b>		
PHYS 331	Mathematical Methods of Physics	3
Physics Elective		3
Free Elective		3
Free Elective		3
RSP		3
<b>Hours</b>		<b>15</b>

<b>Spring</b>		
PHYS 381 or PHYS 382	Advanced Physics Laboratory or Optics Laboratory	2
Free Elective		3

Free Elective	3
RSP	3
Technical Elective	3
<b>Hours</b>	<b>14</b>
<b>Total Hours**</b>	<b>123</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6 64

Revised: 09.2019

## Physics, Bachelor of Arts (BA) - Pre-Master of Education (7-12)

### Program Learning Outcomes

Upon graduation, students in the Physics Program at SRU will be:

- Proficient in the basic and advanced concepts of classical and modern physics.
- Accomplished problem solvers capable of applying inductive and deductive logic, mathematical modeling, computational tools, and principles of physics to novel situations.
- Skilled at constructing and assembling experimental apparatuses, conducting and analyzing measurements of physical phenomena, and drawing valid conclusions from experimental data.
- Effective communicators, capable of presenting scientific results effectively to diverse audiences.
- Prepared for a career in science, industry, and education or to pursue a graduate program in physics or related areas.

### Related Links

Physics - Pre-Masters of Education, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/physics-pre-masters-of-education/>)

Physics and Engineering Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/physics-and-engineering/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

### Curriculum Guide

#### GPA Requirement

Major GPA: 2.00 or higher

Overall GPA: 2.00 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Modern Language Requirements	0-9
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	39
	Concentration Requirements	15
	Natural Science and Math College-Wide Requirements	12
	Electives	36

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 225	Calculus I	4
	Select one of the following:	3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16

#### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
	Select 3 Credits (p. 29)	3
<i>Humanities Inquiry</i>		
	Select 3 Credits (p. 29)	3
<i>Social Science Inquiry</i>		
	Select 3 Credits (p. 29)	3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
<i>Physical Sciences Inquiry</i>		
PHYS 211	General Physics I with Lab	4
Subtotal		17

#### Thematic Thread

	Select 12 Credits (p. 29) <sup>2</sup>	12
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<b>Total Hours</b>	<b>45</b>
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<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
Complete 0-9 credits		0-9
<b>Total Hours</b>		<b>0-9</b>

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 20 major credits must be taken at SRU or PASSHE
- 20 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Physics Courses</b>		
PHYS 212	General Physics II with Lab <sup>1</sup>	3
PHYS 213	General Physics III/ Lab <sup>1</sup>	4
PHYS 312	Modern Physics I <sup>1</sup>	3
PHYS 314	Statics <sup>1</sup>	3
Select one of the following:		3
PHYS 331	Mathematical Methods of Physics <sup>1</sup>	
MATH 331	Mathematical Methods of Physics <sup>1</sup>	
Select one of the following:		2
PHYS 381	Advanced Physics Laboratory <sup>1</sup>	
PHYS 382	Optics Laboratory <sup>1</sup>	
PHYS 412	Modern Physics 2 <sup>1</sup>	1
<b>Subtotal</b>		<b>19</b>

<b>Required Physics Electives</b>		
Select two of the following:		6
PHYS 315	Dynamics <sup>1</sup>	
PHYS 375	Thermal Physics <sup>1</sup>	
PHYS 385	Computational Physics <sup>1</sup>	
PHYS 410	Electricity and Magnetism <sup>1</sup>	
PHYS 480	Quantum <sup>1</sup>	
<b>Subtotal</b>		<b>6</b>
<b>Related Field Work</b>		
CPSC 146	Programming Principles <sup>1</sup>	3
MATH 230	Calculus II <sup>1,2</sup>	4
MATH 231	Calculus III <sup>1</sup>	4
MATH 240	Linear Algebra and Differential Equations <sup>1</sup>	3
<b>Subtotal</b>		<b>14</b>
<b>Total Hours</b>		<b>39</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
CHEM 107	General Chemistry I <sup>1</sup>	3
CHEM 111	General Chemistry I Lab <sup>1</sup>	1
MATH 125	Precalculus <sup>1</sup>	4
or MATH 225	Calculus I	
PHYS 201	Elements of Physics I with Lab <sup>1</sup>	4
or PHYS 211	General Physics I with Lab	
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

## Recommended Courses for Optional Physics Pre Masters in Education Major

Code	Title	Hours
SPED 121	Overview of Special Education	3
SEFE 338	Standards-Based Instruction & Assessment in the Inclusionary Classroom	3
BIOL 101	General Biology	3
or BIOL 105	Environmental Biology	
EGEO 100	Environmental Geology	3
or EGEO 101	Physical Geology	
PHYS 317	Space Science	3
<b>Total Hours</b>		<b>15</b>

PHYSICS - BA (6 64)

w/optional Pre Masters in Education (PX)

This program is effective as of Fall 2019.

Revised 07-2019

UCC 2.5.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

## Physics, Bachelor of Arts (BA) / Pre-Engineering (Pitt) (3+2)

### Program Learning Outcomes

Upon graduation, students in the Physics Program at SRU will be:

- Proficient in the basic and advanced concepts of classical and modern physics.
- Accomplished problem solvers capable of applying inductive and deductive logic, mathematical modeling, computational tools, and principles of physics to novel situations.
- Skilled at constructing and assembling experimental apparatuses, conducting and analyzing measurements of physical phenomena, and drawing valid conclusions from experimental data.
- Effective communicators, capable of presenting scientific results effectively to diverse audiences.
- Prepared for a career in science, industry, and education or to pursue a graduate program in physics or related areas.

## Related Links

Physics - Pre-Engineering PITT, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/pre-engineering-with-pitt/>)

Physics and Engineering Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/physics-and-engineering/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.00 or higher  
Overall GPA: 3.00 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	41
	Modern Language Requirements	Waived
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	58
	Natural Science and Math College-Wide Requirements	12
	Electives	21

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the 1<sup>st</sup> year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 225	Calculus I	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16

#### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
<i>Physical Sciences Inquiry</i>		
PHYS 211	General Physics I with Lab	4
Subtotal		17

#### Additional Rock Studies 2 Requirements

Required Thematic Thread Coursework:		
MATH 230	Calculus II	4
PHYS 213	General Physics III/ Lab	4
Subtotal		8
<b>Total Hours</b>		<b>41</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

### BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
This Requirement is Waived.		
<b>Total Hours</b>		<b>0</b>

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	

**Total Hours** **0-3**

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		

Select one of the following at SRU or another post-secondary institution:

CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	

**Total Hours** **0-3**

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

Code	Title	Hours
<b>Required Physics Courses</b>		

PHYS 140	Engineering Graphics I <sup>1</sup>	2
PHYS 141	Engineering Graphics II <sup>1</sup>	1
PHYS 211	General Physics I with Lab <sup>1</sup>	4
PHYS 212	General Physics II with Lab <sup>1</sup>	3
PHYS 213	General Physics III/ Lab <sup>1</sup>	4
PHYS 314	Statics <sup>1</sup>	3
PHYS 331	Mathematical Methods of Physics <sup>1</sup>	3
or MATH 331	Mathematical Methods of Physics	
Subtotal		20

### Major and Related Electives

Select nine credits of the following: <sup>2</sup> **9**

PHYS 315	Dynamics <sup>1</sup>	
PHYS 371	Physical Optics <sup>1</sup>	
PHYS 375	Thermal Physics <sup>1</sup>	
PHYS 381	Advanced Physics Laboratory <sup>1</sup>	
PHYS 382	Optics Laboratory <sup>1</sup>	
PHYS 385	Computational Physics <sup>1</sup>	
PHYS 410	Electricity and Magnetism <sup>1</sup>	
PHYS 480	Quantum <sup>1</sup>	
CHEM 201	Organic Chemistry I <sup>1</sup>	
CHEM 202	Organic Chemistry II <sup>1</sup>	
CHEM 211	Organic Chemistry Laboratory I <sup>1</sup>	
CHEM 212	Organic Chemistry Laboratory II <sup>1</sup>	
CHEM 301	Physical Chemistry I <sup>1</sup>	
or PHYS 301	Physical Chemistry I	
EGEO 101	Physical Geology <sup>1</sup>	

EGEO 202	Earth History/Lab <sup>1</sup>	
EGEO 111	Physical Geology Lab <sup>1</sup>	
EGEO 201	Earth Materials and Processes/Lab <sup>1</sup>	
EGEO 327	Structural Geology <sup>1</sup>	
EGEO 360	Introduction to Hydrology/Lab <sup>1</sup>	
CPSC 236	Selected Computer Languages <sup>1</sup>	
CPSC 246	Advanced Programming Principles <sup>1</sup>	
CPSC 370	Computer Organization and Architecture <sup>1</sup>	
MATH 315	Numerical Mathematics <sup>1</sup>	
STAT 352	Mathematical Statistics I <sup>1</sup>	

Subtotal **9**

### Required Related Courses

CHEM 107	General Chemistry I <sup>1,3</sup>	3
CHEM 108	General Chemistry II <sup>1,3</sup>	3
CHEM 111	General Chemistry I Lab <sup>1,3</sup>	1
CHEM 112	General Chemistry II Lab <sup>1,3</sup>	1
CPSC 140	Introduction to Programming Principles <sup>1,3</sup>	3
MATH 225	Calculus I <sup>1</sup>	4
MATH 230	Calculus II <sup>1</sup>	4
MATH 231	Calculus III <sup>1</sup>	4
MATH 240	Linear Algebra and Differential Equations <sup>1</sup>	3
MATH 301	Differential Equations I <sup>1</sup>	3

Subtotal **29**

**Total Hours** **58**

- <sup>1</sup> Course counts for 50% of Major requirements and Major GPA
- <sup>2</sup> Elective courses need to be selected based upon area of Engineering chosen. Please contact your Adviser for specific courses.
- <sup>3</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
Students must take the following four courses:		
CHEM 107	General Chemistry I <sup>1</sup>	3
CHEM 111	General Chemistry I Lab <sup>1</sup>	1
MATH 125	Precalculus <sup>1</sup>	4
or MATH 225	Calculus I	
PHYS 201	Elements of Physics I with Lab	4
or PHYS 211	General Physics I with Lab	

**Total Hours** **12**

- <sup>1</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to



ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

PHYSICS PRE ENGINEERING - BA (6 64)

with University of Pittsburgh (6 62)

This program is effective as of Fall 2019.

Revised 10.16.2020

UCC 2.5.2019

## Physics, Bachelor of Arts (BA) / Pre-Engineering (WVU) (3+2)

### Program Learning Outcomes

Upon graduation, students in the Physics Program at SRU will be:

- Proficient in the basic and advanced concepts of classical and modern physics.
- Accomplished problem solvers capable of applying inductive and deductive logic, mathematical modeling, computational tools, and principles of physics to novel situations.
- Skilled at constructing and assembling experimental apparatuses, conducting and analyzing measurements of physical phenomena, and drawing valid conclusions from experimental data.
- Effective communicators, capable of presenting scientific results effectively to diverse audiences.
- Prepared for a career in science, industry, and education or to pursue a graduate program in physics or related areas.

### Related Links

Physics - Pre-Engineering WVU, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/pre-engineering-with-wvu/>)

Physics and Engineering Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/physics-and-engineering/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.00 or higher

Overall GPA: 2.75 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	41
	Modern Language Requirements	Waived
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	58
	Natural Science and Math College-Wide Requirements	12
	Electives	21

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 225	Calculus I	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
<i>Physical Sciences Inquiry</i>		
PHYS 211	General Physics I with Lab	4
Subtotal		17
<b>Additional Rock Studies 2 Requirements</b>		
Required Thematic Thread Coursework:		
MATH 230	Calculus II	4
PHYS 213	General Physics III/ Lab	4
Subtotal		8
<b>Total Hours</b>		<b>41</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

### BA Modern Language Requirements

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
This Requirement is Waived.		
<b>Total Hours</b>		<b>0</b>

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		

ESAP 110	Beginning Algebra
<b>Total Hours</b>	<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		
0-3		
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

Code	Title	Hours
<b>Required Physics Courses</b>		
PHYS 140	Engineering Graphics I <sup>1</sup>	2
PHYS 141	Engineering Graphics II <sup>1</sup>	1
PHYS 211	General Physics I with Lab <sup>1</sup>	4
PHYS 212	General Physics II with Lab <sup>1</sup>	3
PHYS 213	General Physics III/ Lab <sup>1</sup>	4
PHYS 314	Statics <sup>1</sup>	3
PHYS 331	Mathematical Methods of Physics <sup>1</sup>	3
or MATH 331	Mathematical Methods of Physics	
<b>Subtotal</b>		<b>20</b>
<b>Major and Related Electives</b>		
Select nine credits of the following: <sup>2</sup>		
9		
PHYS 315	Dynamics <sup>1</sup>	
PHYS 371	Physical Optics <sup>1</sup>	
PHYS 375	Thermal Physics <sup>1</sup>	
PHYS 381	Advanced Physics Laboratory <sup>1</sup>	
PHYS 382	Optics Laboratory <sup>1</sup>	
PHYS 385	Computational Physics <sup>1</sup>	
PHYS 410	Electricity and Magnetism <sup>1</sup>	
PHYS 480	Quantum <sup>1</sup>	
CHEM 201	Organic Chemistry I <sup>1</sup>	
CHEM 202	Organic Chemistry II <sup>1</sup>	
CHEM 211	Organic Chemistry Laboratory I <sup>1</sup>	
CHEM 212	Organic Chemistry Laboratory II <sup>1</sup>	
CHEM 301	Physical Chemistry I <sup>1</sup>	
or PHYS 301	Physical Chemistry I	
EGEO 101	Physical Geology <sup>1</sup>	
EGEO 202	Earth History/Lab <sup>1</sup>	
EGEO 111	Physical Geology Lab <sup>1</sup>	
EGEO 201	Earth Materials and Processes/Lab <sup>1</sup>	

EGEO 327	Structural Geology <sup>1</sup>	
EGEO 360	Introduction to Hydrology/Lab <sup>1</sup>	
CPSC 236	Selected Computer Languages <sup>1</sup>	
CPSC 246	Advanced Programming Principles <sup>1</sup>	
CPSC 370	Computer Organization and Architecture <sup>1</sup>	
MATH 315	Numerical Mathematics <sup>1</sup>	
STAT 352	Mathematical Statistics I <sup>1</sup>	
<b>Subtotal</b>		<b>9</b>
<b>Required Related Courses</b>		
CHEM 107	General Chemistry I <sup>1,3</sup>	3
CHEM 108	General Chemistry II <sup>1,3</sup>	3
CHEM 111	General Chemistry I Lab <sup>1,3</sup>	1
CHEM 112	General Chemistry II Lab <sup>1,3</sup>	1
CPSC 140	Introduction to Programming Principles <sup>1,3</sup>	3
MATH 225	Calculus I <sup>1</sup>	4
MATH 230	Calculus II <sup>1</sup>	4
MATH 231	Calculus III <sup>1</sup>	4
MATH 240	Linear Algebra and Differential Equations <sup>1</sup>	3
MATH 301	Differential Equations I <sup>1</sup>	3
<b>Subtotal</b>		<b>29</b>
<b>Total Hours</b>		<b>58</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> Elective courses need to be selected based upon area of Engineering chosen. Please contact your Adviser for specific courses

<sup>3</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
Students must take the following four courses:		
CHEM 107	General Chemistry I <sup>1</sup>	3
CHEM 111	General Chemistry I Lab <sup>1</sup>	1
Select one of the following:		
4		
MATH 125	Precalculus <sup>1</sup>	
MATH 225	Calculus I <sup>1</sup>	
PHYS 201	Elements of Physics I with Lab	4
or PHYS 211	General Physics I with Lab	
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

## Important Curriculum Guide Notes

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on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

PHYSICS PRE ENGINEERING - BA (6 64)

with West Virginia University (6 63)

This program is effective as of Fall 2019.

Revised 07.29.2021

UCC 2.5.2019

## Physics, Bachelor of Arts (BA) / Pre-Engineering (YSU) (3+2)

### Program Learning Outcomes

Upon graduation, students in the Physics Program at SRU will be:

- Proficient in the basic and advanced concepts of classical and modern physics.
- Accomplished problem solvers capable of applying inductive and deductive logic, mathematical modeling, computational tools, and principles of physics to novel situations.
- Skilled at constructing and assembling experimental apparatuses, conducting and analyzing measurements of physical phenomena, and drawing valid conclusions from experimental data.
- Effective communicators, capable of presenting scientific results effectively to diverse audiences.
- Prepared for a career in science, industry, and education or to pursue a graduate program in physics or related areas.

### Related Links

Physics - Pre-Engineering YSU, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/pre-engineering-with-ysu/>)

Physics and Engineering Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/physics-and-engineering/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

### Curriculum Guide

#### GPA Requirement

Major GPA: 2.00 or higher

Overall GPA: 2.75 or higher

#### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	41
	Modern Language Requirements	Waived
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	58
	Natural Science and Math College-Wide Requirements	12
	Electives	21

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 225	Calculus I	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
<i>Physical Sciences Inquiry</i>		
PHYS 211	General Physics I with Lab	4
Subtotal		17
<b>Additional Rock Studies 2 Requirements</b>		
Required Thematic Thread Coursework:		
MATH 230	Calculus II	4
PHYS 213	General Physics III/ Lab	4
Subtotal		8
<b>Total Hours</b>		<b>41</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

### BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
This Requirement is Waived.		
<b>Total Hours</b>		<b>0</b>

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		
Meet required minimum SAT or ACT math score OR		0-3

ESAP 110	Beginning Algebra
<b>Total Hours</b>	<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

Code	Title	Hours
<b>Required Physics Courses</b>		
PHYS 140	Engineering Graphics I <sup>1</sup>	2
PHYS 141	Engineering Graphics II <sup>1</sup>	1
PHYS 211	General Physics I with Lab <sup>1</sup>	4
PHYS 212	General Physics II with Lab <sup>1</sup>	3
PHYS 213	General Physics III/ Lab <sup>1</sup>	4
PHYS 314	Statics <sup>1</sup>	3
PHYS 331	Mathematical Methods of Physics <sup>1</sup>	3
or MATH 331	Mathematical Methods of Physics	
<b>Subtotal</b>		<b>20</b>
<b>Major and Related Electives</b>		
Select nine credits of the following: <sup>2</sup>		9
PHYS 315	Dynamics <sup>1</sup>	
PHYS 371	Physical Optics <sup>1</sup>	
PHYS 375	Thermal Physics <sup>1</sup>	
PHYS 381	Advanced Physics Laboratory <sup>1</sup>	
PHYS 382	Optics Laboratory <sup>1</sup>	
PHYS 385	Computational Physics <sup>1</sup>	
PHYS 410	Electricity and Magnetism <sup>1</sup>	
PHYS 480	Quantum <sup>1</sup>	
CHEM 201	Organic Chemistry I <sup>1</sup>	
CHEM 202	Organic Chemistry II <sup>1</sup>	
CHEM 211	Organic Chemistry Laboratory I <sup>1</sup>	
CHEM 212	Organic Chemistry Laboratory II <sup>1</sup>	
CHEM 301	Physical Chemistry I <sup>1</sup>	
or PHYS 301	Physical Chemistry I	
EGEO 101	Physical Geology <sup>1</sup>	
EGEO 202	Earth History/Lab <sup>1</sup>	
EGEO 111	Physical Geology Lab <sup>1</sup>	
EGEO 201	Earth Materials and Processes/Lab <sup>1</sup>	

EGEO 327	Structural Geology <sup>1</sup>	
EGEO 360	Introduction to Hydrology/Lab <sup>1</sup>	
CPSC 236	Selected Computer Languages <sup>1</sup>	
CPSC 246	Advanced Programming Principles <sup>1</sup>	
CPSC 370	Computer Organization and Architecture <sup>1</sup>	
MATH 315	Numerical Mathematics <sup>1</sup>	
STAT 352	Mathematical Statistics I <sup>1</sup>	
<b>Subtotal</b>		<b>9</b>
<b>Required Related Courses</b>		
CHEM 107	General Chemistry I <sup>1,3</sup>	3
CHEM 108	General Chemistry II <sup>1,3</sup>	3
CHEM 111	General Chemistry I Lab <sup>1,3</sup>	1
CHEM 112	General Chemistry II Lab <sup>1,3</sup>	1
CPSC 140	Introduction to Programming Principles <sup>1,3</sup>	3
MATH 225	Calculus I <sup>1</sup>	4
MATH 230	Calculus II <sup>1</sup>	4
MATH 231	Calculus III <sup>1</sup>	4
MATH 240	Linear Algebra and Differential Equations <sup>1</sup>	3
MATH 301	Differential Equations I <sup>1</sup>	3
<b>Subtotal</b>		<b>29</b>
<b>Total Hours</b>		<b>58</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> Elective courses need to be selected based upon area of Engineering chosen. Please contact your Adviser for specific courses

<sup>3</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
Students must take the following four courses:		
CHEM 107	General Chemistry I <sup>1</sup>	3
CHEM 111	General Chemistry I Lab <sup>1</sup>	1
Select one of the following:		4
MATH 125	Precalculus <sup>1</sup>	
MATH 225	Calculus I <sup>1</sup>	
PHYS 201	Elements of Physics I with Lab	4
or PHYS 211	General Physics I with Lab	
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information*

on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

PHYSICS PRE ENGINEERING - BA (6 64)  
with Youngstown State University (6 67)  
This program is effective as of Fall 2019.  
Revised 07.29.2021  
UCC 2.5.2019

## Physics, Bachelor of Arts (BA) / Pre-Engineering Technology (YSU) (3+2)

### Program Learning Outcomes

Upon graduation, students in the Physics Program at SRU will be:

- Proficient in the basic and advanced concepts of classical and modern physics.
- Accomplished problem solvers capable of applying inductive and deductive logic, mathematical modeling, computational tools, and principles of physics to novel situations.
- Skilled at constructing and assembling experimental apparatuses, conducting and analyzing measurements of physical phenomena, and drawing valid conclusions from experimental data.
- Effective communicators, capable of presenting scientific results effectively to diverse audiences.
- Prepared for a career in science, industry, and education or to pursue a graduate program in physics or related areas.

### Related Links

Pre-Engineering YSU, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/pre-engineering-with-ysu/>)

Physics and Engineering Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/physics-and-engineering/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.00 or higher  
Overall GPA: 2.00 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	41
	Modern Language Requirements	Waived
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	58
	Natural Science and Math College-Wide Requirements	12
	Electives	21

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 225	Calculus I	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
<i>Physical Sciences Inquiry</i>		
PHYS 211	General Physics I with Lab	4
Subtotal		17
<b>Additional Rock Studies 2 Requirements</b>		
Required Thematic Thread Coursework:		
MATH 230	Calculus II	4
PHYS 213	General Physics III/ Lab	4
Subtotal		8
<b>Total Hours</b>		<b>41</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

### BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
This Requirement is Waived.		
<b>Total Hours</b>		<b>0</b>

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		



ESAP 110	Beginning Algebra
<b>Total Hours</b>	<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

Code	Title	Hours
<b>Required Physics Courses</b>		
PHYS 140	Engineering Graphics I <sup>1</sup>	2
PHYS 141	Engineering Graphics II <sup>1</sup>	1
PHYS 211	General Physics I with Lab <sup>1</sup>	4
PHYS 212	General Physics II with Lab <sup>1</sup>	3
PHYS 213	General Physics III/ Lab <sup>1</sup>	4
PHYS 314	Statics <sup>1</sup>	3
PHYS 331	Mathematical Methods of Physics <sup>1</sup>	3
or MATH 331	Mathematical Methods of Physics	
<b>Subtotal</b>		<b>20</b>
<b>Major and Related Electives</b>		
Select nine credits of the following: <sup>2</sup>		9
PHYS 315	Dynamics <sup>1</sup>	
PHYS 371	Physical Optics <sup>1</sup>	
PHYS 375	Thermal Physics <sup>1</sup>	
PHYS 381	Advanced Physics Laboratory <sup>1</sup>	
PHYS 382	Optics Laboratory <sup>1</sup>	
PHYS 385	Computational Physics <sup>1</sup>	
PHYS 410	Electricity and Magnetism <sup>1</sup>	
PHYS 480	Quantum <sup>1</sup>	
CHEM 201	Organic Chemistry I <sup>1</sup>	
CHEM 202	Organic Chemistry II <sup>1</sup>	
CHEM 211	Organic Chemistry Laboratory I <sup>1</sup>	
CHEM 212	Organic Chemistry Laboratory II <sup>1</sup>	
CHEM 301	Physical Chemistry I <sup>1</sup>	
or PHYS 301	Physical Chemistry I	
EGEO 101	Physical Geology <sup>1</sup>	
EGEO 202	Earth History/Lab <sup>1</sup>	
EGEO 111	Physical Geology Lab <sup>1</sup>	
EGEO 201	Earth Materials and Processes/Lab <sup>1</sup>	

EGEO 327	Structural Geology <sup>1</sup>	
EGEO 360	Introduction to Hydrology/Lab <sup>1</sup>	
CPSC 236	Selected Computer Languages <sup>1</sup>	
CPSC 246	Advanced Programming Principles <sup>1</sup>	
CPSC 370	Computer Organization and Architecture <sup>1</sup>	
MATH 315	Numerical Mathematics <sup>1</sup>	
STAT 352	Mathematical Statistics I <sup>1</sup>	
<b>Subtotal</b>		<b>9</b>
<b>Required Related Courses</b>		
CHEM 107	General Chemistry I <sup>1,3</sup>	3
CHEM 108	General Chemistry II <sup>1,3</sup>	3
CHEM 111	General Chemistry I Lab <sup>1,3</sup>	1
CHEM 112	General Chemistry II Lab <sup>1,3</sup>	1
CPSC 140	Introduction to Programming Principles <sup>1,3</sup>	3
MATH 225	Calculus I <sup>1</sup>	4
MATH 230	Calculus II <sup>1</sup>	4
MATH 231	Calculus III <sup>1</sup>	4
MATH 240	Linear Algebra and Differential Equations <sup>1</sup>	3
MATH 301	Differential Equations I <sup>1</sup>	3
<b>Subtotal</b>		<b>29</b>
<b>Total Hours</b>		<b>58</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> Elective courses need to be selected based upon area of Engineering chosen. Please contact your Adviser for specific courses

<sup>3</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
Students must take the following four courses:		
CHEM 107	General Chemistry I <sup>1</sup>	3
CHEM 111	General Chemistry I Lab <sup>1</sup>	1
MATH 125	Precalculus <sup>1</sup>	4
or MATH 225	Calculus I	
PHYS 201	Elements of Physics I with Lab	4
or PHYS 211	General Physics I with Lab	
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

PHYSICS PRE ENGINEERING TECH - BA (6 64)

with Youngstown State University (6 68)

This program is effective as of Fall 2019.

Revised 07.29.2021

UCC 2.5.2019

## Physics, Bachelor of Science (BS)

### Program Learning Outcomes

Upon graduation, students in the Physics Program at SRU will be:

- Proficient in the basic and advanced concepts of classical and modern physics.
- Accomplished problem solvers capable of applying inductive and deductive logic, mathematical modeling, computational tools, and principles of physics to novel situations.
- Skilled at constructing and assembling experimental apparatuses, conducting and analyzing measurements of physical phenomena, and drawing valid conclusions from experimental data.
- Effective communicators, capable of presenting scientific results effectively to diverse audiences.
- Prepared for a career in science, industry, and education or to pursue a graduate program in physics or related areas.

### Related Links

Physics, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/physics/>)Physics and Engineering Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/physics-and-engineering/>)Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.00 or higher

Overall GPA: 2.00 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	57
	Natural Science and Math College-Wide Requirements	12
	Electives	18

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 225	Calculus I	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
<i>Physical Sciences Inquiry</i>		
PHYS 211	General Physics I with Lab	4
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>45</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		

CPSC 100	Introduction to Computing for Liberal Arts
CPSC 110	Computer Concepts
CPSC 130	Introduction to Computing and Programming
PE 202	Technology for Wellness

**Total Hours** 0-3

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 29 major credits must be taken at SRU or PASSHE
- 29 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Physics Courses</b>		
PHYS 212	General Physics II with Lab <sup>1</sup>	3
PHYS 213	General Physics III/ Lab <sup>1</sup>	4
PHYS 312	Modern Physics I <sup>1</sup>	3
PHYS 314	Statics <sup>1</sup>	3
PHYS 331	Mathematical Methods of Physics <sup>1</sup>	3
or MATH 331	Mathematical Methods of Physics	
PHYS 371	Physical Optics <sup>1</sup>	3
PHYS 410	Electricity and Magnetism <sup>1</sup>	3
PHYS 412	Modern Physics 2 <sup>1</sup>	1
PHYS 480	Quantum <sup>1</sup>	3
Subtotal		26
<b>Advanced Lab and Optics Lab</b>		
PHYS 381	Advanced Physics Laboratory <sup>1</sup>	2
PHYS 382	Optics Laboratory <sup>1</sup>	2
Subtotal		4
<b>Required Physics Electives</b>		
Select two of the following:		6
PHYS 315	Dynamics <sup>1</sup>	
PHYS 375	Thermal Physics <sup>1</sup>	
PHYS 385	Computational Physics <sup>1</sup>	
Subtotal		6
<b>Related Field Work</b>		
CHEM 108	General Chemistry II <sup>1,2</sup>	3
CHEM 112	General Chemistry II Lab <sup>1,2</sup>	1
MATH 230	Calculus II <sup>1,2</sup>	4
MATH 231	Calculus III <sup>1</sup>	4
MATH 240	Linear Algebra and Differential Equations <sup>1</sup>	3
MATH 301	Differential Equations I <sup>1</sup>	3
CPSC 146	Programming Principles <sup>1,2</sup>	3
Subtotal		21
<b>Total Hours</b>		<b>57</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
Students must take the following four courses:		
CHEM 107	General Chemistry I <sup>1</sup>	3
CHEM 111	General Chemistry I Lab <sup>1</sup>	1
MATH 225	Calculus I <sup>1</sup>	4
PHYS 211	General Physics I with Lab <sup>1</sup>	4
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

PHYSICS - BS (6164)

This program is effective as of Fall 2019.

Revised 7-2019

UCC 2.5.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
ESAP 101	FIRST Seminar *	1
MATH 225	Calculus I	4
PHYS 211	General Physics I with Lab	4
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
PHYS 213	General Physics III/ Lab	4
MATH 230	Calculus II	4
Rock Studies 2 Requirement (p. 29)		3
<b>Hours</b>		<b>14</b>
<b>Second Year</b>		
<b>Fall</b>		
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

Rock Studies 2 Requirement (p. 29)		3
MATH 231	Calculus III	4
PHYS 212	General Physics II with Lab	3
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
Declare a Thematic Thread <sup>2</sup>		
Hours		17
Spring		
Rock Studies 2 Requirement (p. 29)		3
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
MATH 301	Differential Equations I	3
CPSC 146	Programming Principles	3
Free Elective		3
Hours		16
Third Year		
Fall		
PHYS 314	Statics	3
PHYS 331	Mathematical Methods of Physics	3
PHYS 312	Modern Physics 1	3
Rock Studies 2 Requirement (p. 29)		3
MATH 240	Linear Algebra and Differential Equations	3
Hours		15
Spring		
Free Elective		3
PHYS 375	Thermal Physics	3
PHYS 315	Dynamics	3
PHYS 381 or PHYS 382	Advanced Physics Laboratory or Optics Laboratory	2
PHYS 412	Modern Physics 2	1
Free Elective		3
Hours		15
Fourth Year		
Fall		
PHYS 371	Physical Optics	3
Physics Elective		3
Rock Studies 2 Requirement (p. 29)		3
Free Elective		2-3
Rock Studies 2 Requirement (p. 29)		3
Hours		14-15
Spring		
PHYS 381 or PHYS 382	Advanced Physics Laboratory or Optics Laboratory	2
PHYS 410	Electricity and Magnetism	3
PHYS 480	Quantum	3
Rock Studies 2 Requirement (p. 29)		3
Technical Elective		3
Hours		14
Total Hours**		120-121

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6164

Revised: 12-2019

## Physics, Bachelor of Science (BS) - Concentration in Computational Biophysics

### Program Learning Outcomes

Upon graduation, students in the Physics Program at SRU will be:

- Proficient in the basic and advanced concepts of classical and modern physics.
- Accomplished problem solvers capable of applying inductive and deductive logic, mathematical modeling, computational tools, and principles of physics to novel situations.
- Skilled at constructing and assembling experimental apparatuses, conducting and analyzing measurements of physical phenomena, and drawing valid conclusions from experimental data.
- Effective communicators, capable of presenting scientific results effectively to diverse audiences.
- Prepared for a career in science, industry, and education or to pursue a graduate program in physics or related areas.

### Related Links

Physics - Computational Biophysics, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/physics-computational-biophysics/>)

Physics and Engineering Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/physics-and-engineering/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

### Curriculum Guide

#### GPA Requirement

Major GPA: 2.00 or higher

Overall GPA: 2.00 or higher

#### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	57

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

Concentration Requirements	29
Natural Science and Math College-Wide Requirements	12

\* All undergraduate degree programs require a minimum of 120 credits.  
Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 225	Calculus I	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
<i>Physical Sciences Inquiry</i>		
PHYS 211	General Physics I with Lab	4
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>45</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- 29 major credits must be taken at SRU or PASSHE
- 29 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Physics Courses</b>		
PHYS 212	General Physics II with Lab <sup>1</sup>	3
PHYS 213	General Physics III/ Lab <sup>1</sup>	4
PHYS 312	Modern Physics 1 <sup>1</sup>	3
PHYS 314	Statics <sup>1</sup>	3
PHYS 331	Mathematical Methods of Physics <sup>1</sup>	3
or MATH 331	Mathematical Methods of Physics	
PHYS 371	Physical Optics <sup>1</sup>	3
PHYS 410	Electricity and Magnetism <sup>1</sup>	3
PHYS 412	Modern Physics 2 <sup>1</sup>	1
PHYS 480	Quantum <sup>1</sup>	3
Subtotal		26
<b>Advanced Lab Requirements</b>		
PHYS 381	Advanced Physics Laboratory <sup>1</sup>	2
PHYS 382	Optics Laboratory <sup>1</sup>	2
Subtotal		4
<b>Required Physics Electives</b>		
Select two of the following:		6
PHYS 315	Dynamics <sup>1</sup>	
PHYS 375	Thermal Physics <sup>1</sup>	
PHYS 385	Computational Physics <sup>1</sup>	
Subtotal		6
<b>Related Field Work</b>		
CHEM 108	General Chemistry II <sup>1</sup>	3
CHEM 112	General Chemistry II Lab <sup>1</sup>	1
MATH 230	Calculus II <sup>1</sup>	4
MATH 231	Calculus III <sup>1</sup>	4
MATH 240	Linear Algebra and Differential Equations <sup>1</sup>	3
MATH 301	Differential Equations I <sup>1</sup>	3
CPSC 146	Programming Principles <sup>1,2</sup>	3



Subtotal	21
<b>Total Hours</b>	<b>57</b>

- <sup>1</sup> Course counts for 50% of Major requirements and Major GPA
- <sup>2</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
Students must take the following four courses:		
CHEM 107	General Chemistry I <sup>1</sup>	3
CHEM 111	General Chemistry I Lab <sup>1</sup>	1
MATH 225	Calculus I <sup>1</sup>	4
PHYS 211	General Physics I with Lab <sup>1</sup>	4
<b>Total Hours</b>		<b>12</b>

- <sup>1</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

## Computational Biophysics Concentration for BS Physics Majors

Code	Title	Hours
BIOL 104		4
BIOL 250	Genetics with Lab <sup>1</sup>	4
BIOL 325	Biometry with Lab	3
BIOL 335	Cell Biology/Lab	3
BIOL 370	Molecular Biology with Lab	3
CHEM 201	Organic Chemistry I	3
CPSC 246	Advanced Programming Principles	3
CPSC 374	Algorithms and Data Structures	3
CPSC 480	Topics in Computer Science: Machine Learning	3
<b>Total Hours</b>		<b>29</b>

- <sup>1</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

PHYSICS - BS (6164)

Concentration in Computational Biophysics (COBP)

This program is effective as of Fall 2019.

Revised 7-2019

UCC 2.5.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
ESAP 101	FIRST Seminar *	1
MATH 225	Calculus I	4
PHYS 211	General Physics I with Lab	4
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>15</b>

<b>Spring</b>		
ENGL 104	Critical Reading	3
PHYS 213	General Physics III/ Lab	4
MATH 230	Calculus II	4
Rock Studies 2 Requirement (p. 29)		3
<b>Hours</b>		<b>14</b>

<b>Second Year</b>		
<b>Fall</b>		
CPSC 146	Programming Principles	3
Rock Studies 2 Requirement (p. 29)		3
MATH 231	Calculus III	4
PHYS 212	General Physics II with Lab	3
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>17</b>

<b>Spring</b>		
MATH 240	Linear Algebra and Differential Equations	3
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
MATH 301	Differential Equations I	3
CPSC 246	Advanced Programming Principles	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
<b>Hours</b>		<b>16</b>

<b>Third Year</b>		
<b>Fall</b>		
PHYS 314	Statics	3
PHYS 331	Mathematical Methods of Physics	3
PHYS 312	Modern Physics 1	3
Rock Studies 2 Requirement (p. 29)		3
MATH 240	Linear Algebra and Differential Equations	3
<b>Hours</b>		<b>15</b>

<b>Spring</b>		
Technical Elective		3
PHYS 375	Thermal Physics	3
Physics Elective		3

PHYS 381 or PHYS 382	Advanced Physics Laboratory or Optics Laboratory	2
PHYS 412	Modern Physics 2	1
Technical Elective		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
PHYS 371	Physical Optics	3
Physics Elective		3
Rock Studies 2 Requirement (p. 29)		3
Technical Elective		3
Rock Studies 2 Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
PHYS 381 or PHYS 382	Advanced Physics Laboratory or Optics Laboratory	2
PHYS 410	Electricity and Magnetism	3
PHYS 480	Quantum	3
Rock Studies 2 Requirement (p. 29)		3
Technical Elective		2-3
<b>Hours</b>		<b>13-14</b>
<b>Total Hours**</b>		<b>120-121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6164

Concentration Code: COBP

Revised: 12-2019

## Physics, Bachelor of Science (BS) - Concentration in Computational Physics

### Program Learning Outcomes

Upon graduation, students in the Physics Program at SRU will be:

- Proficient in the basic and advanced concepts of classical and modern physics.
- Accomplished problem solvers capable of applying inductive and deductive logic, mathematical modeling, computational tools, and principles of physics to novel situations.
- Skilled at constructing and assembling experimental apparatuses, conducting and analyzing measurements of physical phenomena, and drawing valid conclusions from experimental data.

- Effective communicators, capable of presenting scientific results effectively to diverse audiences.
- Prepared for a career in science, industry, and education or to pursue a graduate program in physics or related areas.

## Related Links

Physics - Computational Physics, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/physics-computational-physics/>)

Physics and Engineering Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/physics-and-engineering/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.00 or higher

Overall GPA: 2.00 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	59
	Natural Science and Math College-Wide Requirements	12
	Electives	16

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 225	Calculus I	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16

### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	3

CHEM 111	General Chemistry I Lab	1
<i>Physical Sciences Inquiry</i>		
PHYS 211	General Physics I with Lab	4
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>45</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- 30 major credits must be taken at SRU or PASSHE
- 29 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Physics Courses</b>		
PHYS 212	General Physics II with Lab <sup>1</sup>	3
PHYS 213	General Physics III/ Lab <sup>1</sup>	4
PHYS 312	Modern Physics 1 <sup>1</sup>	3

PHYS 315	Dynamics <sup>1</sup>	3
PHYS 331	Mathematical Methods of Physics <sup>1</sup>	3
or MATH 331	Mathematical Methods of Physics	
PHYS 381	Advanced Physics Laboratory <sup>1</sup>	2
PHYS 385	Computational Physics <sup>1</sup>	3
PHYS 412	Modern Physics 2 <sup>1</sup>	1
PHYS 480	Quantum <sup>1</sup>	3
PHYS 490	Independent Study <sup>1</sup>	2
Subtotal		27

### Required Physics Electives

Select two of the following: <sup>2</sup>		6
PHYS 314	Statics <sup>1</sup>	
PHYS 325	Analog & Digital Electronics <sup>1</sup>	
PHYS 371	Physical Optics <sup>1</sup>	
PHYS 375	Thermal Physics <sup>1</sup>	
PHYS 410	Electricity and Magnetism <sup>1</sup>	
Subtotal		6

### Related Field Work

CPSC 146	Programming Principles <sup>1</sup>	3
CPSC 246	Advanced Programming Principles <sup>1</sup>	3
CPSC 374	Algorithms and Data Structures <sup>1</sup>	3
MATH 230	Calculus II <sup>1</sup>	4
MATH 231	Calculus III <sup>1</sup>	4
MATH 240	Linear Algebra and Differential Equations <sup>1</sup>	3
MATH 301	Differential Equations I <sup>1</sup>	3
MATH 315	Numerical Mathematics <sup>1</sup>	3
Subtotal		26
<b>Total Hours</b>		<b>59</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> Students are encouraged to take PHYS 410.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
Students must take the following four courses:		
CHEM 107	General Chemistry I <sup>1</sup>	3
CHEM 111	General Chemistry I Lab <sup>1</sup>	1
MATH 225	Calculus I <sup>1</sup>	4
PHYS 211	General Physics I with Lab <sup>1</sup>	4
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

PHYSICS - BS (6164)

Concentration in Computational Physics (COPH)

This program is effective as of Fall 2019.

Revised 02.2020

UCC 2.5.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
ESAP 101	FIRST Seminar *	1
MATH 225	Calculus I	4
PHYS 211	General Physics I with Lab	4
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
PHYS 213	General Physics III/ Lab	4
MATH 230	Calculus II	4
Rock Studies 2 Requirement (p. 29)		3
<b>Hours</b>		<b>14</b>
<b>Second Year</b>		
<b>Fall</b>		
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
CPSC 146	Programming Principles	3
MATH 231	Calculus III	4
PHYS 212	General Physics II with Lab	3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
CPSC 246	Advanced Programming Principles	3
MATH 240	Linear Algebra and Differential Equations	3
MATH 301	Differential Equations I	3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
Free Elective		3
Rock Studies 2 Requirement (p. 29)		3
PHYS 312	Modern Physics 1	3
PHYS 385	Computational Physics	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	

POLS 235	Civil Discourse and Democracy	
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
PHYS 315	Dynamics	3
PHYS 375	Thermal Physics	3
PHYS 381	Advanced Physics Laboratory	2
MATH 315	Numerical Mathematics	3
CPSC 374	Algorithms and Data Structures	3
PHYS 412	Modern Physics 2	1
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
PHYS 490	Independent Study (Computational Physics Research)	1
PHYS 331	Mathematical Methods of Physics	3
Rock Studies 2 Requirement (p. 29)		3
Free Elective		3
Rock Studies 2 Requirement (p. 29)		3
Physics Elective		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Technical Elective		3
PHYS 410	Electricity and Magnetism	3
PHYS 480	Quantum	3
Free Elective		3
PHYS 490	Independent Study (Computational Physics Research)	1
Rock Studies 2 Requirement (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Total Hours**</b>		<b>120</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6164

Concentration: COPH

Revised: 12-2019

## Physics, Bachelor of Science (BS) - Pre-Master of Education (7-12) Program Learning Outcomes

Upon graduation, students in the Physics Program at SRU will be:

- Proficient in the basic and advanced concepts of classical and modern physics.
- Accomplished problem solvers capable of applying inductive and deductive logic, mathematical modeling, computational tools, and principles of physics to novel situations.
- Skilled at constructing and assembling experimental apparatuses, conducting and analyzing measurements of physical phenomena, and drawing valid conclusions from experimental data.
- Effective communicators, capable of presenting scientific results effectively to diverse audiences.
- Prepared for a career in science, industry, and education or to pursue a graduate program in physics or related areas.

## Related Links

Physics - Pre-Masters of Education, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/physics-pre-masters-of-education/>)

Physics and Engineering Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/physics-and-engineering/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.00 or higher  
Overall GPA: 2.00 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	57
	Natural Science and Math College-Wide Requirements	12
	Electives	17

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 225	Calculus I	4
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		16
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		

Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
<i>Physical Sciences Inquiry</i>		
PHYS 211	General Physics I with Lab	4
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>45</b>

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.
- <sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.



## Major Requirements

- 29 major credits must be taken at SRU or PASSHE
- 29 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Physics Courses</b>		
PHYS 212	General Physics II with Lab <sup>1</sup>	3
PHYS 213	General Physics III/ Lab <sup>1</sup>	4
PHYS 312	Modern Physics I <sup>1</sup>	3
PHYS 314	Statics <sup>1</sup>	3
PHYS 331	Mathematical Methods of Physics <sup>1</sup>	3
or MATH 331	Mathematical Methods of Physics	
PHYS 371	Physical Optics <sup>1</sup>	3
PHYS 410	Electricity and Magnetism <sup>1</sup>	3
PHYS 412	Modern Physics 2 <sup>1</sup>	1
PHYS 480	Quantum <sup>1</sup>	3
Subtotal		26
<b>Advanced Lab and Optics Lab</b>		
PHYS 381	Advanced Physics Laboratory <sup>1</sup>	2
PHYS 382	Optics Laboratory <sup>1</sup>	2
Subtotal		4
<b>Required Physics Electives</b>		
Select two of the following:		6
PHYS 315	Dynamics <sup>1</sup>	
PHYS 375	Thermal Physics <sup>1</sup>	
PHYS 385	Computational Physics <sup>1</sup>	
Subtotal		6
<b>Related Field Work</b>		
CHEM 108	General Chemistry II <sup>1,2</sup>	3
CHEM 112	General Chemistry II Lab <sup>1,2</sup>	1
MATH 230	Calculus II <sup>1,2</sup>	4
MATH 231	Calculus III <sup>1</sup>	4
MATH 240	Linear Algebra and Differential Equations <sup>1</sup>	3
MATH 301	Differential Equations I <sup>1</sup>	3
CPSC 146	Programming Principles <sup>1,2</sup>	3
Subtotal		21
<b>Total Hours</b>		<b>57</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Natural Science and Math College-Wide Requirements

Code	Title	Hours
Students must take the following four courses:		
CHEM 107	General Chemistry I <sup>1</sup>	3
CHEM 111	General Chemistry I Lab <sup>1</sup>	1
MATH 225	Calculus I <sup>1</sup>	4
PHYS 211	General Physics I with Lab <sup>1</sup>	4
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

## Recommended Courses for Optional Physics Pre Masters in Education Major

Code	Title	Hours
SPED 121	Overview of Special Education	3
SEFE 338	Standards-Based Instruction & Assessment in the Inclusionary Classroom	3
BIOL 101	General Biology	3
or BIOL 105	Environmental Biology	
EGEO 100	Environmental Geology	3
or EGEO 101	Physical Geology	
PHYS 317	Space Science	3
<b>Total Hours</b>		<b>15</b>

PHYSICS - BS (6164)

w/optional Pre Masters in Education (PX)

This program is effective as of Fall 2019.

Revised 7-2019

UCC 2.5.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

## Physics, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Physics, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/physics/>)

Physics and Engineering Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/physics-and-engineering/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU

- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Physics Courses</b>		
PHYS 211	General Physics I with Lab	4
PHYS 212	General Physics II with Lab	3
PHYS 213	General Physics III/ Lab	4
PHYS 312	Modern Physics 1	3
<b>Elective Physics Courses</b>		
Select two or three of the following courses:		4-6
PHYS 314	Statics	
PHYS 315	Dynamics	
PHYS 331	Mathematical Methods of Physics	
PHYS 371	Physical Optics	
PHYS 375	Thermal Physics	
PHYS 381	Advanced Physics Laboratory	
PHYS 382	Optics Laboratory	
PHYS 385	Computational Physics	
PHYS 410	Electricity and Magnetism	
PHYS 412	Modern Physics 2	
PHYS 480	Quantum	
<b>Total Hours</b>		<b>18-20</b>

- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Minor in Physics (64A)

This program is effective as of Fall 2013.

Revised 8-2019

# College of Health Professions

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## Departments

- Exercise Science and Athletic Training (p. 552)
- Healthcare Administration and Management (p. 601)
- Nursing (p. 657)
- Psychology (p. 663)
- Public Health (p. 712)
- Recreational Therapy (p. 743)
- Social Work (p. 764)

## Exercise Science and Athletic Training

Chair	Secretary	Location	Department Phone
Dr. Patricia Pierce	Connie Schmidt	304 Patterson Hall	724-738-4864

Department Web Site URL (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/exercise-science/>)

Department Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/exsci-fs.pdf>)

**Exercise Science Program Director:** Beth Larouere

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## Faculty

### Jonathan Anning

Associate Professor

Exercise Sci & Athletic Train

Ph.D., University of Toledo

M.A., Central Michigan University

B.A., Central Michigan University

### Jeremy Dicus

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Ph.D., Ohio University

M.S., Ohio University

B.S., High Point University

### Michael Holmstrup

Professor

Exercise Sci & Athletic Train

Ph.D., Syracuse University

M.S., East Stroudsburg University

B.S., East Stroudsburg University

### Seth Jenny

Assistant Professor  
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M.S., Central Washington University  
B.S., Minnesota State University

## **PROGRAMS**

### **MAJORS**

- Exercise Science, Bachelor of Science (BS) (p. 561)
- Exercise Science, Bachelor of Science (BS) / Pre-Athletic Training (SRU) (3+2) (p. 564)
- Exercise Science, Bachelor of Science (BS) / Pre-Athletic Training (SRU) (Traditional) (p. 568)
- Exercise Science, Bachelor of Science (BS) / Pre-Chiropractic (Logan) (3+3) (p. 572)
- Exercise Science, Bachelor of Science (BS) / Pre-Occupational Therapy (SRU) (3+3) (p. 575)
- Exercise Science, Bachelor of Science (BS) / Pre-Occupational Therapy (SRU) (Traditional) (p. 580)
- Exercise Science, Bachelor of Science (BS) / Pre-Physical Therapy (SRU) (3+3) (p. 584)
- Exercise Science, Bachelor of Science (BS) / Pre-Physical Therapy (SRU) (Traditional) (p. 588)
- Exercise Science, Bachelor of Science (BS) / Pre-Physician Assistant (SRU) (3+2) (p. 592)
- Exercise Science, Bachelor of Science (BS) / Pre-Physician Assistant (SRU) (Traditional) (p. 596)

## Courses

### EXSC Courses

#### EXSC 100 - Introduction to Exercise Science: Careers and Content

This course introduces students to the exercise science discipline and the numerous sub-disciplines of exercise science. Opportunities are provided to identify the various content areas of exercise science, characteristics of exercise science professionals and current trends in the field. Emphasis is placed on career planning and employment opportunities.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment is limited to students with a program in Exercise Science.

#### EXSC 101 - Applied Anatomy/Lab

This course focuses on the structure of the human body with emphasis on the musculoskeletal, cardiorespiratory, and nervous systems. The role of the musculoskeletal system in human movement is explored. Laboratory included.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment is limited to students with a program in Exercise Science.

#### EXSC 107 - Introduction to Athletic Training

Introduction to Athletic Training addresses the historical development of athletic training and the scope of present programs, including personnel, space and equipment, necessary supplies, conditioning, pharmacology, classification of sports injuries and tissue response to injuries.

Credits: 3

#### EXSC 117 - Prevention and Emergency Care in Athletic Training

This course is designed to facilitate learning of the cognitive and psychomotor knowledge, skills and abilities utilized in prevention and emergency care in Athletic Training. This course integrates cognitive concepts into progressively higher functional and practical application.

Prerequisites: (ERS 101<sup>B</sup> or EXSC 101<sup>B</sup>) and (ERS 107<sup>B</sup> or EXSC 107<sup>B</sup>)  
<sup>B</sup> Requires minimum grade of B.

Credits: 3

Enrollment is limited to students with a program in Athletic Training.

Enrollment limited to students with department of Exercise Sci & Athletic Train.

#### EXSC 139 - Foundations of Academic Discovery

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

#### EXSC 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

#### EXSC 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

#### EXSC 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

#### EXSC 201 - Exercise Physiology with Lab

This course focuses on the physiological bases of exercise with emphasis on the responses and adaptations of the human body to a variety of exercise stimuli. Laboratory included. Grade of C or better is required in this course.

Prerequisites: (ERS 101<sup>C</sup> or EXSC 101<sup>C</sup>) and (ERS 100 (may be taken concurrently)<sup>C</sup> or ERS 100<sup>\*C</sup>) (may be taken concurrently).

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment is limited to students with a program in Exercise Science.

#### EXSC 202 - Biomechanics with Lab

This course examines human movement using mechanical principles. Human anatomy and basic physics are combined to understand and analyze human movement with specific emphasis on physical activity and exercise. Laboratory included.

Prerequisites: (ERS 101<sup>C</sup> or EXSC 101<sup>C</sup>) and (ERS 100 (may be taken concurrently)<sup>C</sup> or EXSC 100 (may be taken concurrently)<sup>C</sup>) and PHYS 201<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment is limited to students with a program in Exercise Science.

#### EXSC 204 - Introduction to Esports

Do you like video games? This course will introduce students to the exciting world of competitive video gaming, known as "esports." Topics covered may include history, terminology, games, genres, developers, events, leagues, and venues, with a focus on health and performance implications of esports and esports-related career possibilities.

Credits: 3

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

**EXSC 220 - Clinical Experiences in Athletic Training - I**

This course is designed to provide opportunities for students to apply previously acquired athletic training knowledge, skills and abilities in the clinical setting under the direct supervision of a program approved preceptor. Emphasis is placed on practicing and implementing the current NATA Education Competencies designated at Level I in the learning over time model.

Prerequisites: ERS 117<sup>C</sup> or EXSC 117<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Enrollment is limited to students with a program in Athletic Training.

Enrollment limited to students with department of Exercise Sci & Athletic Train.

**EXSC 221 - Lower Extremity Pathology, Diagnosis and Manual Techniques in Athletic Training**

This course is designed to integrate cognitive and psychomotor knowledge, skills and abilities, and facilitate practical application of the psychomotor skills specific to competent diagnosis and management of various injuries, conditions and pathologies incurred to the lower extremity.

Prerequisites: ERS 117<sup>C</sup> or EXSC 117<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 4

Enrollment is limited to students with a program in Athletic Training.

Enrollment limited to students with department of Exercise Sci & Athletic Train.

**EXSC 222 - Fundamentals of Research in Athletic Training**

This course is designed to introduce a foundational knowledge of research, the types of research, and the role it plays in athletic training. Emphasis is placed on developing library research skills, identifying research, demonstrating basic scientific writing skills, and becoming a knowledgeable consumer of research in order to apply it in the clinical environment.

Credits: 3

Enrollment is limited to students with a program in Athletic Training.

Enrollment limited to students with department of Exercise Sci & Athletic Train.

**EXSC 230 - Stress Management**

This course examines intrapersonal and interpersonal stressors, the effect of stress on the body and the key concepts and theories of stress management. Effective stress evaluations and coping strategies for preventing and managing stress will be integrated. After taking this course, students will be able to demonstrate an understanding of the personal and societal impact of stress management.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

**EXSC 231 - Group Exercise Instruction**

This course provides opportunities for practical skills and instruction in various group exercise activities. Emphasis is placed on physiological principles related to group exercise, as well as choreography, safety and modification for diverse populations. Current group exercise trends and research are explored.

Prerequisites: ERS 201<sup>D</sup> or EXSC 201<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

**EXSC 241 - Upper Extremity Pathology, Diagnosis and Manual Techniques in Athletic Training**

This course is designed to integrate cognitive and psychomotor knowledge, skills and abilities, and facilitate practical application of the psychomotor skills specific to competent diagnosis and management of various injuries, conditions and pathologies incurred to the upper extremity.

Prerequisites: ERS 221<sup>C</sup> or EXSC 221<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 4

Enrollment is limited to students with a program in Athletic Training.

Enrollment limited to students with department of Exercise Sci & Athletic Train.

**EXSC 250 - Medical Terminology**

This course is designed to provide the students with a basic understanding of the language of medicine. Emphasis is placed on basic medical word construction and medical language derivation related to health care.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**EXSC 277 - Integrative Approach to Athletic Training**

Integrate cognitive concepts into progressively higher functional and practical application. This integration is to be achieved after completion of selected athletic training classes and by direct supervision and mentoring.

Credits: 3

Enrollment is limited to students with a program in Athletic Training.

**EXSC 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**EXSC 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed



**EXSC 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**EXSC 300 - Research Methods in Exercise Science**

This course examines the scientific method and the role of research in developing knowledge in Exercise Science. Students develop skills to become critical consumers of research and other publicly disseminated information. Students design a data collection project using the concepts learned in the class. Grade of C or better is required in this course.

Prerequisites: (ERS 201<sup>C</sup> or EXSC 201<sup>C</sup>) and (ERS 202<sup>C</sup> or EXSC 202<sup>C</sup>) and STAT 152<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EXSC 301 - Aerobic Exercise Leadership**

This course provides opportunities for the development of practical skills to instruct and lead aerobic exercise. Emphasis is placed on construction of a session utilizing various equipment and modes based upon appropriate physiological theories and biomechanical principles. Safety, effectiveness, intensity monitoring and modifications will be addressed. Grade of C or better is required in this course.

Prerequisites: (ERS 201<sup>C</sup> or EXSC 201<sup>C</sup>) and (ERS 202<sup>C</sup> or EXSC 202<sup>C</sup>)  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Exercise Science.

**EXSC 302 - Exercise Leadership: Resistance Training**

This course provides both the theoretical knowledge and practical skills to safely and effectively design and implement resistance training programs for health and sports performance. Emphasis is placed on physiological and biomechanical principles associated with resistance exercise techniques. Current trends and research in resistance training are explored. Grade of C or better is required in this course.

Prerequisites: (ERS 201<sup>C</sup> or EXSC 201<sup>C</sup>) and (ERS 202<sup>C</sup> or EXSC 202<sup>C</sup>)  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Exercise Science.

**EXSC 304 - Current Issues in Esports Health and Society**

This course is designed to critically examine the current issues confronting esports and video gaming within our increasingly digitized global society, including topics relating to health, performance, and the latest trends in the esports industry.

Credits: 3

Thematic Thread(s): Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EXSC 305 - The Truth About Weight Loss**

This course provides the opportunity to understand how body weight is lost or gained in a healthy and sustainable way. Students will demonstrate understanding of fraudulent practices and products related to weight loss will be explored. Emphasis is placed on individualized practical approaches to weight management, and students will create behavior change strategies related to a personal weight management plan.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EXSC 307 - Concepts of General Medicine in Athletic Training**

This course is designed to integrate cognitive knowledge and abilities with the practical application of psychomotor skills specific to the assessment and management of general medical conditions. This course will provide foundational knowledge and application related to pharmacology.

Prerequisites: ERS 117<sup>C</sup> or EXSC 117<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 4

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EXSC 310 - Clinical Experiences in Athletic Training - II**

This course is designed to provide opportunities for students to apply previously acquired athletic training knowledge, skills and abilities in the clinical setting under the direct supervision of a program approved preceptor. Emphasis is placed on practicing and implementing the current NATA Education Competencies designated at Level II in the learning over time model.

Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Athletic Training.

**EXSC 317 - Therapeutic Modalities Theory and Techniques**

This course is designed to integrate cognitive knowledge and abilities with the practical application or psychomotor skills specific to the use of contemporary physical modalities. This course will provide foundational knowledge and application related to the indications, contraindications and methods of application.

Prerequisites: ERS 221<sup>C</sup> or EXSC 221<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 4

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Athletic Training.

**EXSC 320 - Clinical Experiences in Athletic Training - III**

This course is designed to provide opportunities for students to apply previously acquired athletic training knowledge skills and abilities in the clinical setting under the direct supervision of a program approved preceptor. Emphasis is placed on practicing and implementing the current NATA Education Competencies designated at Level III in the learning over time model.

Prerequisites: ERS 310<sup>C</sup> or EXSC 310<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Athletic Training.

Enrollment limited to students with department of Exercise Sci & Athletic Train.

**EXSC 327 - Therapeutic Modalities Procedures**

Familiarizes the athletic training student with the appropriate application and maintenance of therapeutic modalities. To be taken concurrently with EXSC 317.

Prerequisites: ERS 317 (may be taken concurrently)<sup>D</sup> or EXSC 317 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EXSC 337 - Physical Examination of the Athlete**

Presents knowledge and skills for orthopedic evaluation of the spine and extremities. Includes evaluation of the internal organs as well.

Prerequisites: (ERS 264<sup>D</sup> or EXSC 264<sup>D</sup>) or (ERS 101<sup>D</sup> or EXSC 101<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Athletic Training.

**EXSC 340 - Clinical Experiences in Athletic Training - IV**

This course is designed to provide opportunities at an increasing professional level for students to apply previously acquired athletic training knowledge, skills and abilities in the clinical setting under the direct supervision of a program approved preceptor. Students will practice and implement the current NATA Education Competencies designated at Level IV in the learning over time model.

Prerequisites: ERS 320<sup>C</sup> or EXSC 320<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Athletic Training.

Enrollment limited to students with department of Exercise Sci & Athletic Train.

**EXSC 347 - Therapeutic Rehabilitation in Athletic Training**

This course is designed to facilitate learning specific to the theory and application of therapeutic rehabilitation techniques for a diverse population. Emphasis is placed on the planning and implementation of therapeutic rehabilitation protocols for the prevention and/or care of various injuries.

Prerequisites: ERS 221<sup>C</sup> or EXSC 221<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 4

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Athletic Training.

**EXSC 350 - Advanced Application of Resistance Training**

This course is designed to address advanced theories in the application of resistance training. Selected activities will allow for the application of concepts to individuals with specific goals and considerations (e.g. athletes, diseased populations, etc.). Topics of consideration will include the location and analysis of peer-reviewed resources, individualized needs analysis and the selection of muscular fitness assessments, chronic adaptations to long-term resistance training, and long-term client development and periodization.

Prerequisites: ERS 302<sup>C</sup> or EXSC 302<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Summer & Winter Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EXSC 357 - Application of Therapeutic Techniques**

Enables students to develop the application of therapeutic techniques for the prevention of injury and/or care of the athlete. To be taken concurrently with EXSC 347.

Prerequisites: ERS 347 (may be taken concurrently)<sup>D</sup> or EXSC 347 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Athletic Training.

**EXSC 387 - Practicum in Athletic Training**

Provides educational experiences/assessments in the area of athletic training psychomotor domain, to be coordinated/supervised/mentored in a varied athletic training practicum (totaling a minimum of 1,000 hours). Students will establish/maintain portfolios, develop proper medical documentation and record keeping skills, and be provided opportunities for orthopedic surgery observation.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Athletic Training.

**EXSC 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EXSC 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EXSC 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EXSC 400 - Wellness coaching and Program Management**

This course examines the concepts of health, wellness and resilience. Emphasis placed on developing wellness coaching skills and the ability to utilize behavior change theories to develop wellness programming for individuals and groups. Fundamentals of business administration, as they relate to wellness programming, are also covered. Grade of C or better is required in this course.

Prerequisites: (ERS 300<sup>C</sup> or EXSC 300<sup>C</sup>) and (ERS 301<sup>C</sup> or EXSC 301<sup>C</sup>) and (ERS 302<sup>C</sup> or EXSC 302<sup>C</sup>) and BIOL 216<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Corequisite(s): EXSC 401, EXSC 402 and EXSC 403

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Exercise Science.

**EXSC 401 - Fitness Assessment**

This course provides practical experiences in the selection, administration, and interpretation of various health-related fitness tests. Emphasis is placed on proper technique and communication throughout the assessment process. Grade of C or better is required in this course.

Prerequisites: (ERS 300<sup>C</sup> or EXSC 300<sup>C</sup>) and (ERS 301<sup>C</sup> or EXSC 301<sup>C</sup>) and (ERS 302<sup>C</sup> or EXSC 302<sup>C</sup>) and BIOL 216<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Corequisite(s): EXSC 400, EXSC 402 and EXSC 403

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Exercise Science.

**EXSC 402 - Exercise Prescription**

This course provides the theoretical knowledge and practical skills to design personalized exercise programs that elicit specific physiologic responses and adaptations. Emphasis is placed on prescribing safe and effective individualized cardiorespiratory, musculoskeletal and weight management programs. Grade of C or better is required in this course.

Prerequisites: (ERS 300<sup>C</sup> or EXSC 300<sup>C</sup>) and (ERS 301<sup>C</sup> or EXSC 301<sup>C</sup>) and (ERS 302<sup>C</sup> or EXSC 302<sup>C</sup>) and BIOL 216<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Corequisite(s): EXSC 403

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Exercise Science.

**EXSC 403 - Advanced Exercise Physiology**

This course provides in depth inquiry into the acute responses and long term adaptations of the human body to various types of exercise from the cellular level to the entire system. Emphasis is placed on the physiological demands of exercise and exercising at terrestrial extremes. Laboratory included. Grade of C or better is required in this course.

Prerequisites: (ERS 300<sup>C</sup> or EXSC 300<sup>C</sup>) and (ERS 301<sup>C</sup> or EXSC 301<sup>C</sup>) and (ERS 302<sup>C</sup> or EXSC 302<sup>C</sup>) and BIOL 216<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Corequisite(s): EXSC 400, EXSC 401 and EXSC 402

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

Enrollment is limited to students with a program in Exercise Science.

**EXSC 407 - Healthcare Administration in Athletic Training**

Studies topics relevant to management, organization, administration, and professional development in the profession of athletic training. Topics will include discussions specific to diversity in the health care system.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Athletic Training.

Enrollment limited to students with the DEPT. EXER SCIENCE ACCEPTANCE attribute.

**EXSC 410 - Clinical Exercise Physiology**

This course examines cardiopulmonary exercise physiology, the pathophysiology of selected cardiovascular and respiratory diseases, cardiopulmonary rehabilitation, electrocardiography and clinical graded exercise testing. The influence of age, sex, culture, and ethnicity on risk factors for, prevalence of, and outcomes associated with selected cardiovascular and respiratory diseases are emphasized. Grade of C or better is required in this course.

Prerequisites: (ERS 400<sup>C</sup> or EXSC 400<sup>C</sup>) and (ERS 401<sup>C</sup> or EXSC 401<sup>C</sup>) and (ERS 402<sup>C</sup> or EXSC 402<sup>C</sup>) and (ERS 403<sup>C</sup> or EXSC 403<sup>C</sup>) and BIOL 217<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Corequisite(s): EXSC 411 and EXSC 412

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Exercise Science.

**EXSC 411 - Exercise Science: Special Populations and Conditions**

This course evaluates the impact of physical activity and exercise on youth, older adults, and individuals with various health conditions and controlled diseases. Changes that occur during growth, development, maturation and the aging process in relation to physical activity/ exercise are examined. Pathophysiology, disease management, medications, exercise testing, and acute responses and chronic adaptations of physical activity/exercise programs for individuals with various health conditions and controlled diseases are identified. Special considerations for health, disease, and physical activity / exercise programming for diverse populations are explored. Grade of C or better is required in this course.

Prerequisites: (ERS 400<sup>C</sup> or EXSC 400<sup>C</sup>) and (ERS 401<sup>C</sup> or EXSC 401<sup>C</sup>) and (ERS 402<sup>C</sup> or EXSC 402<sup>C</sup>) and (ERS 403<sup>C</sup> or EXSC 403<sup>C</sup>) and BIOL 217<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Corequisite(s): EXSC 410 and EXSC 412

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Exercise Science.

**EXSC 412 - Exercise Science: Senior Synthesis**

This course provides the opportunity to synthesize knowledge, skills and abilities in both classroom and supervised practical settings. Emphasis is placed on developing, implementing and evaluating comprehensive exercise programs for diverse clientele. Opportunities to enhance professional and personal development are provided. Valid CPR/AED certification and proof of professional liability insurance required. Grade of C or better is required in this course.

Prerequisites: (ERS 400<sup>C</sup> or EXSC 400<sup>C</sup>) and (ERS 401<sup>C</sup> or EXSC 401<sup>C</sup>) and (ERS 402<sup>C</sup> or EXSC 402<sup>C</sup>) and (ERS 403<sup>C</sup> or EXSC 403<sup>C</sup>) and (ERS 424 (may be taken concurrently)<sup>C</sup> or EXSC 424 (may be taken concurrently)<sup>C</sup>) and BIOL 217<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Corequisite(s): EXSC 410 and EXSC 411

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Exercise Science.

**EXSC 417 - Wellness and Reconditioning in Athletic Training**

This course is designed to facilitate learning specific to safe and effective health-related wellness screening, and the design and implementation of fitness programs for a diverse population. Incorporates theoretical knowledge and skills of health and wellness.

Prerequisites: ERS 117<sup>C</sup> or EXSC 117<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Athletic Training.

Enrollment limited to students with department of Exercise Sci & Athletic Train.

**EXSC 424 - Nutrition and Exercise**

This course provides an understanding of the dietary standards that dictate nutritional requirements for apparently healthy adults. Emphasis is placed on the evaluation of an recommendations for macronutrients, micronutrients, and hydration status for health, physical activity, and human performance. Grade of C or better is required in this course.

Prerequisites: (HLTH 314<sup>C</sup> or ERS 300<sup>C</sup> or EXSC 300<sup>C</sup>) and (ERS 301<sup>C</sup> or EXSC 301<sup>C</sup>) and (ERS 302<sup>C</sup> or EXSC 302<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students in the College of Health Professions college.

**EXSC 427 - Mastery in Athletic Training**

A capstone course that allows the student to synthesize and apply knowledge and skills of an entry-level athletic trainer in a comprehensive manner.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Athletic Training.

**EXSC 430 - Seminar in Strength and Conditioning**

This course analyzes advanced strength and conditioning theory and practice. Topics include musculoskeletal and cardiorespiratory physiology, metabolism and nutrition, acute responses to exercise and chronic adaptations to training, biomechanical concepts, measurement and evaluation, resistance training techniques, exercise prescription, speed development, and plyometric training. In addition, this course prepares students to take the Certified Strength and Conditioning Specialist (CSCS) examination provided by the National Strength and Conditioning Association (NSCA).

Prerequisites: ERS 302<sup>D</sup> or EXSC 302<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EXSC 431 - Health and Fitness in the Older Adult**

This course examines wellness promotion and health fitness programs for the older adult, particularly people age fifty and above. Emphasis is placed upon prevention or delay of chronic diseases or disorders.

Prerequisites: (ERS 401<sup>C</sup> or EXSC 401<sup>C</sup>) and (ERS 402<sup>C</sup> or EXSC 402<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EXSC 432 - Pediatric Exercise Science**

This course examines health, physical activity, and physical fitness status of children and adolescents. Physiological responses to exercise, methodologies for assessing physical fitness and physical activity, and promotion of physical activity are discussed. Current research in various topics related to exercise in children and adolescents are explored.

Prerequisites: (ERS 401<sup>C</sup> or EXSC 401<sup>C</sup>) and (ERS 402<sup>C</sup> or EXSC 402<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EXSC 434 - Physiology of Aging and Physical Activity**

This course examines the physiology of the aging process with emphasis on the effects of physical activity on health and on the degenerative process of aging. Emphasis is placed on the physiological responses to aging that are influenced by physical activity.

Prerequisites: (ERS 401<sup>C</sup> or EXSC 401<sup>C</sup>) and (ERS 402<sup>C</sup> or EXSC 402<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EXSC 435 - Exercise Programming for Cancer**

This course provides a foundation for an integration of knowledge and skills regarding the components of cancer, cancer treatments, and the concepts of rehabilitating cancer patients using exercise interventions. Emphasis is placed on physiological alterations that occur during and following cancer therapy and the effects that exercise has on eliminating or reducing these effects. Opportunities to develop individualized exercise programs for cancer patients will be provided.

Prerequisites: (ERS 201<sup>C</sup> or EXSC 201<sup>C</sup>) and (ERS 301<sup>C</sup> or EXSC 301<sup>C</sup>) and (ERS 302<sup>C</sup> or EXSC 302<sup>C</sup>) and (ERS 402<sup>C</sup> or EXSC 402<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**EXSC 450 - Exercise Science Internship**

This course provides the opportunity for students to develop and apply exercise science knowledge, skills, and abilities in a supervised university approved setting. Valid CPR/AED certification and proof of professional liability insurance required. Grade of C or better is required in this course

Prerequisites: (ERS 400<sup>C</sup> or EXSC 400<sup>C</sup>) and (ERS 401<sup>C</sup> or EXSC 401<sup>C</sup>) and (ERS 402<sup>C</sup> or EXSC 402<sup>C</sup>) and (ERS 403<sup>C</sup> or EXSC 403<sup>C</sup>) and (ERS 410<sup>C</sup> or EXSC 410<sup>C</sup>) and (ERS 411<sup>C</sup> or EXSC 411<sup>C</sup>) and (ERS 412<sup>C</sup> or EXSC 412<sup>C</sup>) and (ERS 424<sup>C</sup> or EXSC 424<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3-12

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Exercise Science.

**EXSC 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EXSC 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**EXSC 497 - Clinical Synthesis in Athletic Training**

This course provides the students with decision-making opportunities to synthesize and integrate all previously acquired athletic training knowledge, skills and abilities in the classroom and clinical setting under the direct supervision of a program approved preceptor. Students will practice and implement all the current NATA Education Competencies designated at the clinical integration proficiency level.

Prerequisites: ERS 340<sup>C</sup> or EXSC 340<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Athletic Training.

Enrollment limited to students with department of Exercise Sci & Athletic Train.

**EXSC 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Exercise Science, Bachelor of Science (BS)

### PROGRAM LEARNING OUTCOMES

- **Professional Competence:** To utilize knowledge, skills, and abilities to evaluate health behavior and risk factors; develop, implement, and evaluate evidence-based exercise and wellness programs, and employ behavioral strategies to motivate individuals to adopt and maintain positive lifestyle behaviors. UO 3,4,5
- **Professional Interaction and Communication:** To interact and communicate effectively by presenting information in oral and written formats, collaborating with professionals and peers, expressing ideas clearly, and giving and receiving feedback. UO 1
- **Professional Behavior and Involvement:** To model professional behaviors (including preparedness, engagement, and appearance), and demonstrate professional involvement across the major. UO 5,7,9
- **Ethical Reasoning:** To make well-informed and unbiased decisions to enhance the well-being of others UO 8, 10
- **Critical Thinking:** To demonstrate clear and accurate reasoning to make decisions and solve problems. UO 2

## Academic Policies for Students in the Exercise Science Major

*Effective for all Exercise Science Majors beginning Spring 2021*

1. Policy for earning acceptable grades in the Exercise Science program:
  - a. A student must earn a grade of "C" or better in ALL Required Basic Courses (EXSC 100's, EXSC 200's, EXSC 300's) and Required Upper Level Courses (EXSC 400's, EXSC 410's, EXSC 424, EXSC 450).
  - b. A student must earn a grade of "C" or better in ALL Natural Science and Math College-Wide Requirements (BIOL 209, BIOL 309, BIOL 216, BIOL 217, STAT 152, PHYS 201).
  - c. The Exercise Science curriculum is structured with pre-requisites. A student must earn a "C" or better in the pre-requisite course to be able to take the next course. See course catalog for pre-requisites.
  - d. If a student does not earn a "C" or better, they will be required to:
    - i. Retake the course
    - ii. They will be dropped from any course(s) in the following semester that requires a "C" or better as a pre-requisite (see course catalog for pre-requisites)
    - iii. Students will need to meet with their Academic Advisor and change their schedule accordingly
2. SRU has a *Repeat of Courses Policy* as follows and it can be found in the course catalog: Repeat of Courses < Slippery Rock University (sru.edu) (<https://catalog.sru.edu/archive/2022-2023/academic-policies/repeat-of-courses/>)
  - a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade.
3. Once the student has exceeded the *SRU Repeat of Courses Policy*, the student will have their major changed to Exploratory and EXSC - Exercise Science Major courses will be removed from their schedule.
4. Policy for changing to the Exercise Science major:
  - a. A Slippery Rock University student wishing to change their major to Exercise Science MUST have an overall GPA of 2.00.
  - b. A transfer student who enters from another University must have an overall GPA of 2.00.
5. Additional costs associated with the Exercise Science major:
  - a. Lab fees will be collected for exercise science classes with a lab component. This fee enhances the department's ability to offer a high-quality program.

Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis.

Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades.

In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for post-baccalaureate students is the same as the undergraduate student policy.

- b. A student in the Exercise Science major is required to maintain current CPR/AED, First Aid, and Student Professional Liability Insurance while enrolled in EXSC 412 and EXSC 450 at their own cost. More information will be provided to students in the upper level EXSC courses.
- c. EXSC 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

*Updated September 14, 2021*

## RELATED LINKS

Exercise Science, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/exercise-science/>)

Exercise Science Program Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/exercise-science/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT – EXERCISE SCIENCE

#### 1st Major: Exercise Science

- Overall GPA: 2.0 or higher
- Major GPA (includes Major Requirements and College Wide Requirements): 2.0 or higher

#### SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	44
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	57
	Natural Science and Math College-Wide Requirements	15
	Electives	15

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

#### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
BIOL 209		4
<i>Physical Science Inquiry</i>		
PHYS 201	Elements of Physics I with Lab	4
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>44</b>

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject
- <sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## MAJOR REQUIREMENTS

- 29 major credits must be taken at SRU or PASSHE
- 29 major credits must be taken at the 300 level or above
- Students may choose to earn a BS in Exercise Science as preparation for graduate studies in many health care related fields. In this case, the student should learn what prerequisites are required for his/her intended graduate program and take those courses as electives while completing the Exercise Science Program.
- This program prepares you to sit for national examinations. While professional licensure/certification is not required, some employers may require certification.

Code	Title	Hours
<b>Required Basic Courses</b>		
Must earn a "C" or better in the following courses		
EXSC 100	Introduction to Exercise Science: Careers and Content <sup>1,2</sup>	3
EXSC 101	Applied Anatomy/Lab <sup>1,2</sup>	3
EXSC 201	Exercise Physiology with Lab <sup>1,2</sup>	3
EXSC 202	Biomechanics with Lab <sup>1,2</sup>	3
EXSC 300	Research Methods in Exercise Science <sup>1,2</sup>	3
EXSC 301	Aerobic Exercise Leadership <sup>1,2</sup>	3
EXSC 302	Exercise Leadership: Resistance Training <sup>1,2</sup>	3
Subtotal		21
<b>Required Upper Level Courses</b>		
Must earn a "C" or better in the following courses		
EXSC 400	Wellness coaching and Program Management <sup>1,2</sup>	3
EXSC 401	Fitness Assessment <sup>1,2</sup>	3
EXSC 402	Exercise Prescription <sup>1,2</sup>	3
EXSC 403	Advanced Exercise Physiology	3
EXSC 410	Clinical Exercise Physiology <sup>1,2</sup>	3
EXSC 411	Exercise Science: Special Populations and Conditions	3
EXSC 412	Exercise Science: Senior Synthesis <sup>1,2</sup>	3
EXSC 424	Nutrition and Exercise <sup>1,2</sup>	3
EXSC 450	Exercise Science Internship <sup>1,2</sup>	6
EXSC 450	Exercise Science Internship <sup>1,2</sup>	6
Subtotal		36
<b>Total Hours</b>		<b>57</b>

<sup>1</sup> Course counts toward Major GPA

<sup>2</sup> Course counts for 50% of Major requirements

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## NATURAL SCIENCE AND MATH COLLEGE-WIDE REQUIREMENTS

Code	Title	Hours
Must earn a "C" or better in the following courses		
BIOL 209		4
BIOL 309		4
PHYS 201	Elements of Physics I with Lab <sup>1</sup>	4

STAT 152	Elementary Statistics I <sup>1</sup>	3
<b>Total Hours</b>		<b>15</b>

<sup>1</sup> Course counts toward Major GPA

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Exercise Science - BS (6149)

This program is effective as of Summer 2022

Revised 06.09.2022

UCC 03.01.2022

## RECOMMENDED FOUR-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
Select one of the following:		3
EXSC 100	Introduction to Exercise Science: Careers and Content <sup>3</sup>	
EXSC 101	Applied Anatomy/Lab <sup>3</sup>	
PHYS 201	Elements of Physics I with Lab <sup>1,3</sup>	4
SUBJ 139	Foundations of Academic Discovery <sup>2</sup>	3
Rock Studies 2 Requirements (p. 29)		6
ESAP 101	FIRST Seminar *	1
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
Select one of the following:		3
EXSC 100	Introduction to Exercise Science: Careers and Content <sup>3</sup>	
EXSC 101	Applied Anatomy/Lab <sup>3</sup>	
STAT 152	Elementary Statistics I <sup>1,3</sup>	3
Rock Studies 2 Requirements (p. 29)		9
Computer Competency Course (only if needed)		1
<b>Hours</b>		<b>16</b>

### Second Year

<b>Fall</b>		
Select one of the following: <sup>3</sup>		3
EXSC 201	Exercise Physiology with Lab <sup>3</sup>	
EXSC 202	Biomechanics with Lab <sup>3</sup>	
BIOL 209	Anatomy & Physiology I w/ Lab <sup>2</sup>	4
Rock Studies 2 Requirements (p. 29)		9
<b>Hours</b>		<b>16</b>

### Spring

Select one of the following: <sup>3</sup>		3
EXSC 201	Exercise Physiology with Lab <sup>3</sup>	

EXSC 202	Biomechanics with Lab <sup>3</sup>	
Rock Studies 2 Requirements OR Elective (p. 29)		9
BIOL 309	Human Anatomy & Physiology II <sup>3</sup>	4
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
EXSC 300	Research Methods in Exercise Science <sup>3</sup>	3
EXSC 301	Aerobic Exercise Leadership <sup>3</sup>	3
EXSC 302	Exercise Leadership: Resistance Training <sup>3</sup>	3
Rock Studies 2 Requirements OR Electives (p. 29)		6
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EXSC 400	Wellness coaching and Program Management <sup>3</sup>	3
EXSC 401	Fitness Assessment <sup>3</sup>	3
EXSC 402	Exercise Prescription <sup>3</sup>	3
EXSC 403	Advanced Exercise Physiology <sup>3</sup>	3
Rock Studies 2 Requirements OR Elective (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
EXSC 410	Clinical Exercise Physiology <sup>3</sup>	3
EXSC 411	Exercise Science: Special Populations and Conditions <sup>3</sup>	3
EXSC 412	Exercise Science: Senior Synthesis <sup>3</sup>	3
Select one of the following:		3
EXSC 424	Nutrition and Exercise <sup>3</sup>	
HLTH 424	Nutrition and Exercise <sup>3</sup>	
Rock Studies 2 Requirements OR Elective (p. 29)		3-4
<b>Hours</b>		<b>15-16</b>
<b>Spring</b>		
EXSC 450	Exercise Science Internship <sup>3,4</sup>	12
<b>Hours</b>		<b>12</b>
<b>Total Hours**</b>		<b>122-123</b>

<sup>1</sup> Course satisfies majors and Rock Studies 2 requirements

<sup>2</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>3</sup> Must earn a grade of "C" or better

<sup>4</sup> EXSC 490: Exercise Science Internship may be scheduled Only after all prerequisites are met. Also required are a valid First Aid, CPR/AED certification and proof of student professional liability insurance. EXSC 412 provides all necessary information pertaining to the internship registration process and is taken the semester prior to internship.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6149

Revised: 02.10.2023

## Exercise Science, Bachelor of Science (BS) / Pre-Athletic Training (SRU) (3+2)

### EXERCISE SCIENCE PROGRAM LEARNING OUTCOMES

- **Professional Competence:** To utilize knowledge, skills, and abilities to evaluate health behavior and risk factors; develop, implement, and evaluate evidence-based exercise and wellness programs, and employ behavioral strategies to motivate individuals to adopt and maintain positive lifestyle behaviors. UO 3,4,5
- **Professional Interaction and Communication:** To interact and communicate effectively by presenting information in oral and written formats, collaborating with professionals and peers, expressing ideas clearly, and giving and receiving feedback. UO 1
- **Professional Behavior and Involvement:** To model professional behaviors (including preparedness, engagement, and appearance), and demonstrate professional involvement across the major. UO 5,7,9
- **Ethical Reasoning:** To make well-informed and unbiased decisions to enhance the well-being of others UO 8,10
- **Critical Thinking:** To demonstrate clear and accurate reasoning to make decisions and solve problems. UO 2

### What are your options?

**Pre-Athletic Training SRU 3+2:** Earn a Master of Science degree in Athletic Training in five years rather than six. In the first three years, you complete your major courses and pre-requisites for the SRU AT graduate program. During your third undergraduate year, you apply for admission into the SRU AT graduate program. If accepted, your first year in the SRU AT graduate program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Athletic Training (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU AT graduate program and apply to the SRU AT graduate program in your senior year.

### Academic Policies for Students in the Exercise Science Major

*Effective for all Exercise Science Majors beginning Spring 2021*

1. Policy for earning acceptable grades in the Exercise Science program:
  - a. A student must earn a grade of "C" or better in ALL Required Basic Courses (EXSC 100's, EXSC 200's, EXSC 300's) and Required Upper Level Courses (EXSC 400's, EXSC 410's, EXSC 424, EXSC 450).
  - b. A student must earn a grade of "C" or better in ALL Natural Science and Math College-Wide Requirements (BIOL 209, BIOL 309, BIOL 216, BIOL 217, STAT 152, PHYS 201).
  - c. The Exercise Science curriculum is structured with pre-requisites. A student must earn a "C" or better in the pre-requisite course to be able to take the next course. See course catalog for pre-requisites.

- d. If a student does not earn a "C" or better, they will be required to:
  - i. Retake the course
  - ii. They will be dropped from any course(s) in the following semester that requires a "C" or better as a pre-requisite (see course catalog for pre-requisites)
  - iii. Students will need to meet with their Academic Advisor and change their schedule accordingly

TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

**Updated September 14, 2021**

## RELATED LINKS

Exercise Science - Pre-Athletic Training, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/exercise-science-pre-athletic-training/>)

Exercise Science Program Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/exercise-science/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT – EXERCISE SCIENCE

#### 1<sup>st</sup> Major: Exercise Science

- Overall GPA: 2.00 or higher
- Major GPA (includes Major Requirements and College Wide Requirements): 2.00 or higher

#### 2<sup>nd</sup> Major: Pre-AT SRU 3+2 Exercise Science

- Overall GPA: 3.00 or higher

### SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	44
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	45
	Natural Science and Math College-Wide Requirements	15
	Additional Athletic Training Prerequisite Course	13
	Electives	14

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the 1<sup>st</sup> year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.

### ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	

2. SRU has a *Repeat of Courses Policy* as follows and it can be found in the course catalog: Repeat of Courses < Slippery Rock University (sru.edu) (<https://catalog.sru.edu/archive/2022-2023/academic-policies/repeat-of-courses/>)

- a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade.

Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis.

Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades.

In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for post-baccalaureate students is the same as the undergraduate student policy.

3. Once the student has exceeded the *SRU Repeat of Courses Policy*, the student will have their major changed to Exploratory and EXSC - Exercise Science Major courses will be removed from their schedule.
4. Policy for changing to the Exercise Science major:
  - a. A Slippery Rock University student wishing to change their major to Exercise Science MUST have an overall GPA of 2.00.
  - b. A transfer student who enters from another University must have an overall GPA of 2.00.
5. Additional costs associated with the Exercise Science major:
  - a. Lab fees will be collected for exercise science classes with a lab component. This fee enhances the department's ability to offer a high-quality program.
  - b. A student in the Exercise Science major is required to maintain current CPR/AED, First Aid, and Student Professional Liability Insurance while enrolled in EXSC 412 and EXSC 450 at their own cost. More information will be provided to students in the upper level EXSC courses.
  - c. EXSC 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations,



Subtotal	15
<b>Integrated Inquiry</b>	
<i>Creative and Aesthetic Inquiry</i>	
Select 3 Credits (p. 29)	3
<i>Humanities Inquiry</i>	
Select 3 Credits (p. 29)	3
<i>Social Science Inquiry</i>	
Select 3 Credits (p. 29)	3
<i>Natural Sciences Inquiry</i>	
BIOL 209	4
<i>Physical Science Inquiry</i>	
PHYS 201 Elements of Physics I with Lab	4
Subtotal	17
<b>Thematic Thread</b>	
Select 12 Credits (p. 29) <sup>2,3</sup>	12
<b>Total Hours</b>	<b>44</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

<sup>3</sup> Additional Athletic Training prerequisite courses may be fulfilled in a Thematic Thread.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this

requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## MAJOR REQUIREMENTS

- If you choose to pursue Pre-Athletic Training SRU 3+2 Exercise Science and are not accepted into the AT program, then EXSC 450: Internship is required to complete a first major of Exercise Science. Please refer to the Exercise Science Curriculum Guide.

Code	Title	Hours
<b>Required Basic Courses</b>		
Must earn a "C" or better in the following courses		
EXSC 100	Introduction to Exercise Science: Careers and Content <sup>1,2</sup>	3
EXSC 101	Applied Anatomy/Lab <sup>1,2</sup>	3
EXSC 201	Exercise Physiology with Lab <sup>1,2</sup>	3
EXSC 202	Biomechanics with Lab <sup>1,2</sup>	3
EXSC 300	Research Methods in Exercise Science <sup>1,2</sup>	3
EXSC 301	Aerobic Exercise Leadership <sup>1,2</sup>	3
EXSC 302	Exercise Leadership: Resistance Training <sup>1,2</sup>	3
Subtotal		21
<b>Required Upper Level Courses (24 credits if accepted to SRU AT Program)</b>		
Must earn a "C" or better in the following courses		
EXSC 400	Wellness coaching and Program Management <sup>1,2</sup>	3
EXSC 401	Fitness Assessment <sup>1,2</sup>	3
EXSC 402	Exercise Prescription <sup>1,2</sup>	3
EXSC 403	Advanced Exercise Physiology <sup>1,2</sup>	3
EXSC 410	Clinical Exercise Physiology <sup>1,2</sup>	3
EXSC 411	Exercise Science: Special Populations and Conditions <sup>1,2</sup>	3
EXSC 412	Exercise Science: Senior Synthesis <sup>1,2</sup>	3
EXSC 424	Nutrition and Exercise <sup>1,2</sup>	3
Subtotal		24
<b>Total Hours</b>		<b>45</b>

<sup>1</sup> Course counts toward Major GPA

<sup>2</sup> Course counts for 50% of Major requirements

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## NATURAL SCIENCE AND MATH COLLEGE-WIDE REQUIREMENTS

Code	Title	Hours
Must earn a "C" or better in the following courses		
BIOL 209		4
BIOL 309		4
PHYS 201	Elements of Physics I with Lab <sup>1</sup>	4
STAT 152	Elementary Statistics I <sup>1</sup>	3
<b>Total Hours</b>		<b>15</b>

<sup>1</sup> Course counts toward Major GPA

## ADDITIONAL ATHLETIC TRAINING PREREQUISITE COURSES

Code	Title	Hours
BIOL 101	General Biology	4
or BIOL 110	The Human Body: Fundamentals of Structure and Physiology	
or BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	
CHEM 104	Introduction Chemistry I	3
or CHEM 107	General Chemistry I	
EXSC 250	Medical Terminology	3
or HCAM 250	Medical Terminology for Healthcare Administrators	
PSYC 105	Introduction to Psychology	3

## Athletic Training Graduate Program (Master of Science in Athletic Training)

### Prerequisite Admission Requirements – Pre-Athletic Training SRU 3+2

#### For Application Requirements:

Please refer to Slippery Rock University's Athletic Training Graduate Program. (Master of Science in Athletic Training) website for requirements: [www.sru.edu/AT](http://www.sru.edu/AT) (<http://www.sru.edu/AT/>)

Code	Title	Hours
<b>Pre-Requisite Courses - SRU Athletic Training Graduate Program:</b>		
EXSC 201	Exercise Physiology with Lab	3
or PE 238	Applied Principles of Exercise	
EXSC 202	Biomechanics with Lab	3
or PE 364	Biomechanics of Individuals with Disabilities	
EXSC 250	Medical Terminology	3
or HCAM 250	Medical Terminology for Healthcare Administrators	
EXSC 424	Nutrition and Exercise	3
or PE 393	Nutrition for Physical Activity, Exercise, and Health	
BIOL 110	The Human Body: Fundamentals of Structure and Physiology	3
or BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	
BIOL 209		4
BIOL 309		4
CHEM 104	Introduction Chemistry I	3
or CHEM 107	General Chemistry I	
PHYS 201	Elements of Physics I with Lab	4
PSYC 105	Introduction to Psychology	3
STAT 152	Elementary Statistics I	3

### Requirements for Pre-Athletic Training SRU 3+2:

If any of these requirements are not met, the 3+2 designation will be removed from the student's record:

1. A 3.0 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Athletic Training SRU 3+2 program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

#### Provision:

Should a Pre-Athletic Training SRU 3+2 student be unsuccessful in completing the 1st three semesters (summer or fall or spring terms) of the Athletic Training Graduate Program and want to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, graduate level AT courses will count toward the completion of his/her undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the AT program with an earned Bachelor's degree.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

EXERCISE SCIENCE - BS (6149)

PRE-AT SRU 3+2 (6SAT)

This program is effective as of Summer 2022

Revised 06.09.2022

UCC 03.01.2022

## RECOMMENDED THREE-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
Select one of the following:		3
EXSC 100	Introduction to Exercise Science: Careers and Content <sup>3</sup>	
EXSC 101	Applied Anatomy/Lab <sup>3</sup>	
PHYS 201	Elements of Physics I with Lab <sup>1,3</sup>	4
PSYC 105	Introduction to Psychology <sup>1</sup>	3
SUBJ 139	Foundations of Academic Discovery <sup>2</sup>	3
Rock Studies 2 Requirements (p. 29)		3
ESAP 101	FYRST Seminar <sup>*</sup>	1
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
Select one of the following:		3
EXSC 100	Introduction to Exercise Science: Careers and Content <sup>3</sup>	
EXSC 101	Applied Anatomy/Lab <sup>3</sup>	
STAT 152	Elementary Statistics I <sup>1,3</sup>	3
Rock Studies 2 Requirements (p. 29)		9
Computer Competency Course (only if needed)		0-1
<b>Hours</b>		<b>15-16</b>

### Second Year

#### Fall

EXSC 201	Exercise Physiology with Lab <sup>3</sup>	3
EXSC 202	Biomechanics with Lab <sup>3</sup>	3

BIOL 209	Human Anatomy & Physiology I <sup>1,3</sup>	4
Rock Studies 2 Requirements (p. 29)		9
<b>Hours</b>		<b>19</b>
<b>Spring</b>		
EXSC 300	Research Methods in Exercise Science <sup>3</sup>	3
EXSC 301	Aerobic Exercise Leadership <sup>3</sup>	3
EXSC 302	Exercise Leadership: Resistance Training <sup>3</sup>	3
BIOL 309	Human Anatomy & Physiology II <sup>3</sup>	4
EXSC 250 or HCAM 250	Medical Terminology or Medical Terminology for Healthcare Administrators	3
Rock Studies 2 Requirements (p. 29)		3
<b>Hours</b>		<b>19</b>
<b>Third Year</b>		
<b>Fall</b>		
EXSC 400	Wellness coaching and Program Management <sup>3</sup>	3
EXSC 401	Fitness Assessment <sup>3</sup>	3
EXSC 402	Exercise Prescription <sup>3</sup>	3
EXSC 403	Advanced Exercise Physiology <sup>3</sup>	3
CHEM 104 or CHEM 107	Introduction Chemistry I or General Chemistry I	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EXSC 410	Clinical Exercise Physiology <sup>3</sup>	3
EXSC 411	Exercise Science: Special Populations and Conditions <sup>3</sup>	3
EXSC 412	Exercise Science: Senior Synthesis <sup>3</sup>	3
Select one of the following:		3
EXSC 424	Nutrition and Exercise <sup>3</sup>	
HLTH 424	Nutrition and Exercise <sup>3</sup>	
BIOL 101 or BIOL 110 or BIOL 114	General Biology or The Human Body: Fundamentals of Structure and Physiology or Biology II: Foundations of Molecules, Genes and Cells with Lab	3
Rock Studies 2 Requirements (p. 29)		3
<b>Hours</b>		<b>18</b>
<b>Fourth Year</b>		
<b>Fall</b>		
<b>Senior Year: If not accepted into SRU AT<sup>4</sup></b>		
EXSC 450	Exercise Science Internship <sup>3</sup>	12
<b>Hours</b>		<b>12</b>
<b>Total Hours**</b>		<b>115-116</b>

<sup>1</sup> Course satisfies majors and Rock Studies requirements.

<sup>2</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>3</sup> Must earn a "C" or better in the course.

<sup>4</sup> If NOT accepted into SRU AT

\* Students are encouraged to take ESAP 101 as a Free Elective.

Students must meet all Exercise Science 3+2 major requirements, SRU Athletic Training (AT) Graduate Program prerequisites, and Rock studies requirements to apply.

**Senior Year- If accepted into the SRU AT Graduate Program:** The first year will count as the 4th year of the Exercise Science program. Upon successful completion of the first year of the SRU AT Graduate Program, students will graduate with a BS in Exercise Science. Should an Exercise Science 3+2 student be unsuccessful in completing the 1st year of the SRU AT Graduate Program and wants to complete their original undergraduate degree, it is solely up to the discretion of their undergraduate program Department Chair to determine which, if any Athletic Training courses will count toward the completion of their undergraduate degree. In addition, students must complete EXSC 450: Exercise Science Internship (12 credits).

**Senior Year- If not accepted into SRU AT Graduate Program:** If you choose to pursue Exercise Science 3+2 and are not accepted into SRU AT Graduate Program, then EXSC 450: Exercise Science Internship (12 credits) is required to complete a first major of Exercise Science. Please refer to the Exercise Science Curriculum Guide.

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

Major Code: 6149

Pre-Athletic Training SRU 3+2 (6SAT)

Revised: 02.10.2023

## Exercise Science, Bachelor of Science (BS) / Pre-Athletic Training (SRU) (Traditional)

### EXERCISE SCIENCE PROGRAM LEARNING OUTCOMES

- **Professional Competence:** To utilize knowledge, skills, and abilities to evaluate health behavior and risk factors; develop, implement, and evaluate evidence-based exercise and wellness programs, and employ behavioral strategies to motivate individuals to adopt and maintain positive lifestyle behaviors. UO 3,4,5
- **Professional Interaction and Communication:** To interact and communicate effectively by presenting information in oral and written formats, collaborating with professionals and peers, expressing ideas clearly, and giving and receiving feedback. UO 1
- **Professional Behavior and Involvement:** To model professional behaviors (including preparedness, engagement, and appearance), and demonstrate professional involvement across the major. UO 5,7,9
- **Ethical Reasoning:** To make well-informed and unbiased decisions to enhance the well-being of others. UO 8,10
- **Critical Thinking:** To demonstrate clear and accurate reasoning to make decisions and solve problems. UO 2

### What are your options?

**Pre-Athletic Training SRU 3+2:** Earn a Master of Science degree in Athletic Training in five years rather than six. In the first three years, you

complete your major courses and pre-requisites for the SRU AT graduate program. During your third undergraduate year, you apply for admission into the SRU AT graduate program. If accepted, your first year in the SRU AT graduate program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Athletic Training (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU AT graduate program and apply to the SRU AT graduate program in your senior year.

## Academic Policies for Students in the Exercise Science Major

*Effective for all Exercise Science Majors beginning Spring 2021*

1. Policy for earning acceptable grades in the Exercise Science program:
  - a. A student must earn a grade of "C" or better in ALL Required Basic Courses (EXSC 100's, EXSC 200's, EXSC 300's) and Required Upper Level Courses (EXSC 400's, EXSC 410's, EXSC 424, EXSC 450).
  - b. A student must earn a grade of "C" or better in ALL Natural Science and Math College-Wide Requirements (BIOL 209, BIOL 309, BIOL 216, BIOL 217, STAT 152, PHYS 201).
  - c. The Exercise Science curriculum is structured with pre-requisites. A student must earn a "C" or better in the pre-requisite course to be able to take the next course. See course catalog for pre-requisites.
  - d. If a student does not earn a "C" or better, they will be required to:
    - i. Retake the course
    - ii. They will be dropped from any course(s) in the following semester that requires a "C" or better as a pre-requisite (see course catalog for pre-requisites)
    - iii. Students will need to meet with their Academic Advisor and change their schedule accordingly

2. SRU has a *Repeat of Courses Policy* as follows and it can be found in the course catalog: Repeat of Courses < Slippery Rock University (sru.edu) (<https://catalog.sru.edu/archive/2022-2023/academic-policies/repeat-of-courses/>)
  - a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade.

Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis.

Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades.

In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for post-baccalaureate students is the same as the undergraduate student policy.

3. Once the student has exceeded the *SRU Repeat of Courses Policy*, the student will have their major changed to Exploratory and EXSC - Exercise Science Major courses will be removed from their schedule.
4. Policy for changing to the Exercise Science major:
  - a. A Slippery Rock University student wishing to change their major to Exercise Science MUST have an overall GPA of 2.00.
  - b. A transfer student who enters from another University must have an overall GPA of 2.00.
5. Additional costs associated with the Exercise Science major:
  - a. Lab fees will be collected for exercise science classes with a lab component. This fee enhances the department's ability to offer a high-quality program.
  - b. A student in the Exercise Science major is required to maintain current CPR/AED, First Aid, and Student Professional Liability Insurance while enrolled in EXSC 412 and EXSC 450 at their own cost. More information will be provided to students in the upper level EXSC courses.
  - c. EXSC 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

*Updated September 14, 2021*

## RELATED LINKS

Exercise Science - Pre-Athletic Training, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/exercise-science-pre-athletic-training/>)

Exercise Science Program Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/exercise-science/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT - EXERCISE SCIENCE

Overall GPA: 2.00 or higher

Major GPA (includes Major Requirements and College-Wide Requirements): 2.00 or higher

### SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	44
	Other Basic Requirements	0-3

Computer Competency	0-3
Major Requirements	57
Natural Science and Math College-Wide Requirements	15
Additional Athletic Training Prerequisite Courses	13
Electives	2

\* All undergraduate degree programs require a minimum of 120 credits.  
Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
BIOL 209		4
<i>Physical Science Inquiry</i>		
PHYS 201	Elements of Physics I with Lab	4
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2,3</sup>		12
<b>Total Hours</b>		<b>44</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

<sup>3</sup> Additional Athletic Training prerequisite courses may be fulfilled in a Thematic Thread.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## MAJOR REQUIREMENTS

- 29 major credits must be taken at SRU or PASSHE
- 29 major credits must be taken at the 300 level or above
- Students may choose to earn a BS in Exercise Science as preparation for graduate studies in many health care related fields. In this case, the student should learn what prerequisites are required for his/her intended graduate program and take those courses as electives while completing the Exercise Science Program.

Code	Title	Hours
<b>Required Basic Courses</b>		
Must earn a "C" or better in the following courses		
EXSC 100	Introduction to Exercise Science: Careers and Content <sup>1,2</sup>	3
EXSC 101	Applied Anatomy/Lab <sup>1,2</sup>	3
EXSC 201	Exercise Physiology with Lab <sup>1,2</sup>	3
EXSC 202	Biomechanics with Lab <sup>1,2</sup>	3
EXSC 300	Research Methods in Exercise Science <sup>1,2</sup>	3
EXSC 301	Aerobic Exercise Leadership <sup>1,2</sup>	3
EXSC 302	Exercise Leadership: Resistance Training <sup>1,2</sup>	3
Subtotal		21
<b>Required Upper Level Courses</b>		
Must earn a "C" or better in the following courses		
EXSC 400	Wellness coaching and Program Management <sup>1,2</sup>	3
EXSC 401	Fitness Assessment <sup>1,2</sup>	3
EXSC 402	Exercise Prescription <sup>1,2</sup>	3
EXSC 403	Advanced Exercise Physiology <sup>1,2</sup>	3
EXSC 410	Clinical Exercise Physiology <sup>1,2</sup>	3



EXSC 411	Exercise Science: Special Populations and Conditions <sup>1,2</sup>	3
EXSC 412	Exercise Science: Senior Synthesis <sup>1,2</sup>	3
EXSC 424	Nutrition and Exercise <sup>1,2</sup>	3
EXSC 450	Exercise Science Internship <sup>1,2</sup>	6
EXSC 450	Exercise Science Internship <sup>1,2</sup>	6
Subtotal		36
<b>Total Hours</b>		<b>57</b>

<sup>1</sup> Course counts toward Major GPA

<sup>2</sup> Course counts for 50% of Major requirements

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## NATURAL SCIENCE AND MATH COLLEGE-WIDE REQUIREMENTS

Code	Title	Hours
Must earn a "C" or better in the following courses		
BIOL 209		4
BIOL 309		4
PHYS 201	Elements of Physics I with Lab <sup>1</sup>	4
STAT 152	Elementary Statistics I <sup>1</sup>	3
<b>Total Hours</b>		<b>15</b>

<sup>1</sup> Course counts toward Major GPA

## ADDITIONAL ATHLETIC TRAINING PREREQUISITE COURSES

Code	Title	Hours
BIOL 101	General Biology	4
or BIOL 110	The Human Body: Fundamentals of Structure and Physiology	
or BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	
CHEM 104	Introduction Chemistry I	3
or CHEM 107	General Chemistry I	
EXSC 250	Medical Terminology	3
or HCAM 250	Medical Terminology for Healthcare Administrators	
PSYC 105	Introduction to Psychology	3

## Athletic Training Graduate Program (Master of Science in Athletic Training)

### Prerequisite Admission Requirements

#### For Application Requirements:

Please refer to Slippery Rock University's Athletic Training Graduate Program. (Master of Science in Athletic Training) website for requirements: [www.sru.edu/AT/](http://www.sru.edu/AT/) (<http://www.sru.edu/AT/>)

Code	Title	Hours
<b>Pre-Requisite Courses - SRU Athletic Training Graduate Program:</b>		
EXSC 201	Exercise Physiology with Lab	3
or PE 238	Applied Principles of Exercise	
EXSC 202	Biomechanics with Lab	3

or PE 364	Biomechanics of Individuals with Disabilities	
EXSC 250	Medical Terminology	3
or HCAM 250	Medical Terminology for Healthcare Administrators	
EXSC 424	Nutrition and Exercise	3
or PE 393	Nutrition for Physical Activity, Exercise, and Health	
BIOL 110	The Human Body: Fundamentals of Structure and Physiology	3
or BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	
BIOL 209		
BIOL 309		
CHEM 104	Introduction Chemistry I	3
or CHEM 107	General Chemistry I	
PHYS 201	Elements of Physics I with Lab	4
PSYC 105	Introduction to Psychology	3
STAT 152	Elementary Statistics I	3

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Exercise Science - BS (6149)

PRE-AT (SRU Traditional)

This program is effective as of Summer 2022

Revised 06.09.2022

UCC 03.01.2022

## RECOMMENDED FOUR-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
Select one of the following:		3
EXSC 100	Introduction to Exercise Science: Careers and Content <sup>3</sup>	
EXSC 101	Applied Anatomy/Lab <sup>3</sup>	
PHYS 201	Elements of Physics I with Lab <sup>1,3</sup>	4
PSYC 105	Introduction to Psychology <sup>1</sup>	3
SUBJ 139	Foundations of Academic Discovery <sup>2</sup>	3
Rock Studies 2 Requirements (p. 29)		3
ESAP 101	FYRST Seminar *	1
<b>Hours</b>		<b>17</b>

<b>Spring</b>		
Select one of the following:		3
EXSC 100	Introduction to Exercise Science: Careers and Content <sup>3</sup>	
EXSC 101	Applied Anatomy/Lab <sup>3</sup>	

STAT 152	Elementary Statistics I <sup>1,3</sup>	3
Rock Studies 2 Requirements (p. 29)		9
Computer Competency Course (only if needed)		0-1
<b>Hours</b>		<b>15-16</b>

**Second Year****Fall**

Select one of the following:		3
EXSC 201	Exercise Physiology with Lab <sup>3</sup>	
EXSC 202	Biomechanics with Lab <sup>3</sup>	
BIOL 209	Human Anatomy & Physiology I <sup>1,3</sup>	4
Rock Studies 2 Requirements (p. 29)		9

**Hours** **16**

**Spring**

Select one of the following:		3
EXSC 201	Exercise Physiology with Lab <sup>3</sup>	
EXSC 202	Biomechanics with Lab <sup>3</sup>	
BIOL 309	Human Anatomy & Physiology II <sup>3</sup>	4
Rock Studies 2 Requirements OR Elective (p. 29)		6
EXSC 250 or HCAM 250	Medical Terminology or Medical Terminology for Healthcare Administrators	3
<b>Hours</b>		<b>16</b>

**Third Year****Fall**

EXSC 300	Research Methods in Exercise Science <sup>3</sup>	3
EXSC 301	Aerobic Exercise Leadership <sup>3</sup>	3
EXSC 302	Exercise Leadership: Resistance Training <sup>3</sup>	3
CHEM 104 or CHEM 107	Introduction Chemistry I or General Chemistry I	3
Rock Studies 2 Requirements OR Elective (p. 29)		3

**Hours** **15**

**Spring**

EXSC 400	Wellness coaching and Program Management <sup>3</sup>	3
EXSC 401	Fitness Assessment <sup>3</sup>	3
EXSC 402	Exercise Prescription <sup>3</sup>	3
EXSC 403	Advanced Exercise Physiology <sup>3</sup>	3
BIOL 101 or BIOL 110 or BIOL 114	General Biology or The Human Body: Fundamentals of Structure and Physiology or Biology II: Foundations of Molecules, Genes and Cells with Lab	3
Rock Studies 2 Requirements OR Elective (p. 29)		3

**Hours** **18**

**Fourth Year****Fall**

EXSC 410	Clinical Exercise Physiology <sup>3</sup>	3
EXSC 411	Exercise Science: Special Populations and Conditions <sup>3</sup>	3
EXSC 412	Exercise Science: Senior Synthesis <sup>3</sup>	3
Select one of the following:		3
EXSC 424	Nutrition and Exercise <sup>3</sup>	
HLTH 424	Nutrition and Exercise <sup>3</sup>	

Rock Studies 2 Requirements OR Elective (p. 29)	3
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**Hours** **15**

**Spring**

EXSC 450	Exercise Science Internship <sup>3,4,5</sup>	12
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**Hours** **12**

**Total Hours\*\*** **124-125**

**SRU Athletic Training Program begins in the summer.**

- <sup>1</sup> Course satisfies majors and Rock Studies 2 requirements.
  - <sup>2</sup> Course offered in multiple subjects; cannot take course in first major subject
  - <sup>3</sup> Must earn a grade of "C" or better
  - <sup>4</sup> EXSC 450: Exercise Science Internship may be scheduled Only after all prerequisites are met. Also required are a valid First Aid, CPR/AED certification and proof of student professional liability insurance. EXSC 412 provides all necessary information pertaining to the internship registration process and is taken the semester prior to internship.
  - <sup>5</sup> Students must complete this 12 credit requirement by registering for two sections of this 6-cr hour course in the same semester
- \* Students are encouraged to take ESAP 101 as a Free Elective.

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

Major Code: 6149

Pre-Athletic Training SRU Traditional (P2)

Revised: 2.10.2023

## Exercise Science, Bachelor of Science (BS) / Pre-Chiropractic (Logan) (3+3)

### EXERCISE SCIENCE PROGRAM LEARNING OUTCOMES

- **Professional Competence:** To utilize knowledge, skills, and abilities to evaluate health behavior and risk factors; develop, implement, and evaluate evidence-based exercise and wellness programs, and employ behavioral strategies to motivate individuals to adopt and maintain positive lifestyle behaviors. UO 3,4,5
- **Professional Interaction and Communication:** To interact and communicate effectively by presenting information in oral and written formats, collaborating with professionals and peers, expressing ideas clearly, and giving and receiving feedback. UO 1
- **Professional Behavior and Involvement:** To model professional behaviors (including preparedness, engagement, and appearance), and demonstrate professional involvement across the major. UO 5,7,9
- **Ethical Reasoning:** To make well-informed and unbiased decisions to enhance the well-being of others. UO 8, 10
- **Critical Thinking:** To demonstrate clear and accurate reasoning to make decisions and solve problems. UO 2

## WHAT ARE YOUR OPTIONS?

**Pre-Chiropractic Logan 3+3:** Earn a Doctor of Chiropractic (DC) in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the Logan University DC graduate program. All students who successfully complete the Pre-Chiropractic program with a cumulative GPA of 3.0 or higher and meet all other criteria for admission will be accepted and transfer to Logan's DC program. On completion of your first year and minimally 30 credits, you will receive your bachelor's degree from SRU. You will then continue at Logan to complete the requirements for the DC degree. The accelerated option is for incoming freshmen only.

## Academic Policies for Students in the Exercise Science Major

*Effective for all Exercise Science Majors beginning Spring 2021*

1. Policy for earning acceptable grades in the Exercise Science program:
  - a. A student must earn a grade of "C" or better in ALL Required Basic Courses (EXSC 100's, EXSC 200's, EXSC 300's) and Required Upper Level Courses (EXSC 400's, EXSC 410's, EXSC 424, EXSC 450).
  - b. A student must earn a grade of "C" or better in ALL Natural Science and Math College-Wide Requirements (BIOL 209, BIOL 309, BIOL 216, BIOL 217, STAT 152, PHYS 201).
  - c. The Exercise Science curriculum is structured with pre-requisites. A student must earn a "C" or better in the pre-requisite course to be able to take the next course. See course catalog for pre-requisites.
  - d. If a student does not earn a "C" or better, they will be required to:
    - i. Retake the course
    - ii. They will be dropped from any course(s) in the following semester that requires a "C" or better as a pre-requisite (see course catalog for pre-requisites)
    - iii. Students will need to meet with their Academic Advisor and change their schedule accordingly
2. SRU has a *Repeat of Courses Policy* as follows and it can be found in the course catalog: Repeat of Courses < Slippery Rock University (sru.edu) (<https://catalog.sru.edu/archive/2022-2023/academic-policies/repeat-of-courses/>)
  - a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade.

Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis.

Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades.

In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for post-baccalaureate students is the same as the undergraduate student policy.

3. Once the student has exceeded the *SRU Repeat of Courses Policy*, the student will have their major changed to Exploratory and EXSC - Exercise Science Major courses will be removed from their schedule.
4. Policy for changing to the Exercise Science major:
  - a. A Slippery Rock University student wishing to change their major to Exercise Science MUST have an overall GPA of 2.00.
  - b. A transfer student who enters from another University must have an overall GPA of 2.00.
5. Additional costs associated with the Exercise Science major:
  - a. Lab fees will be collected for exercise science classes with a lab component. This fee enhances the department's ability to offer a high-quality program.
  - b. A student in the Exercise Science major is required to maintain current CPR/AED, First Aid, and Student Professional Liability Insurance while enrolled in EXSC 412 and EXSC 450 at their own cost. More information will be provided to students in the upper level EXSC courses.
  - c. EXSC 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

*Updated September 14, 2021*

## RELATED LINKS

Exercise Science - Pre-Chiropractic, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/exercise-science/>)

Exercise Science Program Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/exercise-science/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT – EXERCISE SCIENCE

#### 1<sup>st</sup> Major: Exercise Science

- Overall GPA: 2.00 or higher
- Major GPA (includes Major Requirements and College Wide Requirements): 2.00 or higher

#### 2<sup>nd</sup> Major: Exercise Science 3+3 Pre-Chiropractic (Logan)

- Overall GPA: 2.75 minimum for consideration in standard admission process
- Overall GPA: 3.00 or higher for acceptance

## SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	44
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	45
	Natural Science and Math College-Wide Requirements	15
	Additional Pre-Chiropractic (Logan) 3+3 Exercise Science Requirement	1
	Electives	26

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the 1<sup>st</sup> year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.

## ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
BIOL 209		4
<i>Physical Science Inquiry</i>		
PHYS 201	Elements of Physics I with Lab	4
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>44</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## MAJOR REQUIREMENTS

- If you choose to pursue Exercise Science 3+3 Pre-Chiropractic (Logan) and are not accepted, then EXSC 450: Internship is required to complete a first major of Exercise Science. Please refer to the Exercise Science Curriculum Guide.

Code	Title	Hours
<b>Required Basic Courses</b>		
Must earn a "C" or better in the following courses		
EXSC 100	Introduction to Exercise Science: Careers and Content <sup>1,2</sup>	3
EXSC 101	Applied Anatomy/Lab <sup>1,2</sup>	3
EXSC 201	Exercise Physiology with Lab <sup>1,2</sup>	3
EXSC 202	Biomechanics with Lab <sup>1,2</sup>	3
EXSC 300	Research Methods in Exercise Science <sup>1,2</sup>	3
EXSC 301	Aerobic Exercise Leadership <sup>1,2</sup>	3
EXSC 302	Exercise Leadership: Resistance Training <sup>1,2</sup>	3
Subtotal		21

**Required Upper Level Courses (24 credits if accepted to Logan Doctor of Chiropractic Program)**

Must earn a "C" or better in the following courses

EXSC 400	Wellness coaching and Program Management <sup>1,2</sup>	3
EXSC 401	Fitness Assessment <sup>1,2</sup>	3
EXSC 402	Exercise Prescription <sup>1,2</sup>	3
EXSC 403	Advanced Exercise Physiology <sup>1,2</sup>	3
EXSC 410	Clinical Exercise Physiology <sup>1,2</sup>	3
EXSC 411	Exercise Science: Special Populations and Conditions <sup>1,2</sup>	3
EXSC 412	Exercise Science: Senior Synthesis <sup>1,2</sup>	3
EXSC 424 or HLTH 424	Nutrition and Exercise <sup>1,2</sup> Nutrition and Exercise	3
Subtotal		24
<b>Total Hours</b>		<b>45</b>

<sup>1</sup> Course counts toward Major GPA<sup>2</sup> Course counts for 50% of Major requirements

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**NATURAL SCIENCE AND MATH COLLEGE-WIDE REQUIREMENTS**

Code	Title	Hours
Must earn a "C" or better in the following courses		
BIOL 209		4
BIOL 309		4
PHYS 201	Elements of Physics I with Lab <sup>1</sup>	4
STAT 152	Elementary Statistics I <sup>1</sup>	3
<b>Total Hours</b>		<b>15</b>

<sup>1</sup> Course counts toward Major GPA**ADDITIONAL PRE-CHIROPRACTIC (logan) 3+3 eXERCISE SCIENCE COURSES**

Code	Title	Hours
Must earn a "C" or better in the following course:		
ESAP 101	FYRST Seminar	1
<b>Total Hours</b>		<b>1</b>

**ADDITIONAL PRE-CHIROPRACTIC (LOGAN) 3+3 EXERCISE SCIENCE COURSES**

If any of these requirements are not met, the 3+3 designation will be removed from the student's record:

1. A minimum of 2.75 overall GPA must be maintained by student for standard admission at the discretion of Logan University's Vice President of Admissions and Financial Aid.
2. A 3.0 or higher overall GPA must be maintained by the student for acceptance to Logan's Doctor of Chiropractic Degree Program.
3. The student can only be enrolled in the Pre-Chiropractic Program (Logan) 3+3 Exercise Science program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

**Provision:**

Should a student enrolled in the Exercise Science 3+3 Pre-Chiropractic (Logan) designation be unsuccessful in completing the 1st three semesters (summer or fall or spring terms) of the Doctor of Chiropractic Degree Program, and want to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, graduate level Chiropractic courses will count toward the completion of their undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still be able to apply to Logan University's Doctor of Chiropractic Degree Program with an earned Bachelor's degree.

**Important Curriculum Guide Notes**

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

EXERCISE SCIENCE - BS (6149)

PRE-OT SRU 3+3 (6EPC)

This program is effective as of Summer 2022

Revised 06.28.2022

UCC 02.15.2022

**Exercise Science, Bachelor of Science (BS) / Pre-Occupational Therapy (SRU) (3+3)****EXERCISE SCIENCE PROGRAM LEARNING OUTCOMES**

- **Professional Competence:** To utilize knowledge, skills, and abilities to evaluate health behavior and risk factors; develop, implement, and evaluate evidence-based exercise and wellness programs, and employ behavioral strategies to motivate individuals to adopt and maintain positive lifestyle behaviors. UO 3,4,5
- **Professional Interaction and Communication:** To interact and communicate effectively by presenting information in oral and written formats, collaborating with professionals and peers, expressing ideas clearly, and giving and receiving feedback. UO 1
- **Professional Behavior and Involvement:** To model professional behaviors (including preparedness, engagement, and appearance), and demonstrate professional involvement across the major. UO 5,7,9
- **Ethical Reasoning:** To make well-informed and unbiased decisions to enhance the well-being of others. UO 8,10
- **Critical Thinking:** To demonstrate clear and accurate reasoning to make decisions and solve problems. UO 2

**What are your options?**

**Pre-Occupational Therapy SRU 3+3:** Earn a Doctor of Occupational Therapy in six years rather than seven. In the first three years, you



complete your major courses and pre-requisites for the SRU OTD program. At the end of your second year, you apply for admission into the SRU OTD program. If accepted, your first year in the SRU OTD program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Occupational Therapy (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU OTD program and apply to the SRU OTD program in your senior year.

## Academic Policies for Students in the Exercise Science Major

*Effective for all Exercise Science Majors beginning Spring 2021*

1. Policy for earning acceptable grades in the Exercise Science program:
  - a. A student must earn a grade of "C" or better in ALL Required Basic Courses (EXSC 100's, EXSC 200's, EXSC 300's) and Required Upper Level Courses (EXSC 400's, EXSC 410's, EXSC 424, EXSC 450).
  - b. A student must earn a grade of "C" or better in ALL Natural Science and Math College-Wide Requirements (BIOL 209, BIOL 309, BIOL 216, BIOL 217, STAT 152, PHYS 201).
  - c. The Exercise Science curriculum is structured with pre-requisites. A student must earn a "C" or better in the pre-requisite course to be able to take the next course. See course catalog for pre-requisites.
  - d. If a student does not earn a "C" or better, they will be required to:
    - i. Retake the course
    - ii. They will be dropped from any course(s) in the following semester that requires a "C" or better as a pre-requisite (see course catalog for pre-requisites)
    - iii. Students will need to meet with their Academic Advisor and change their schedule accordingly
2. SRU has a *Repeat of Courses Policy* as follows and it can be found in the course catalog: Repeat of Courses < Slippery Rock University (sru.edu) (<https://catalog.sru.edu/archive/2022-2023/academic-policies/repeat-of-courses/>)
  - a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade.

Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis.

Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades.

In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for post-baccalaureate students is the same as the undergraduate student policy.

3. Once the student has exceeded the *SRU Repeat of Courses Policy*, the student will have their major changed to Exploratory and EXSC - Exercise Science Major courses will be removed from their schedule.
4. Policy for changing to the Exercise Science major:
  - a. A Slippery Rock University student wishing to change their major to Exercise Science MUST have an overall GPA of 2.00.
  - b. A transfer student who enters from another University must have an overall GPA of 2.00.
5. Additional costs associated with the Exercise Science major:
  - a. Lab fees will be collected for exercise science classes with a lab component. This fee enhances the department's ability to offer a high-quality program.
  - b. A student in the Exercise Science major is required to maintain current CPR/AED, First Aid, and Student Professional Liability Insurance while enrolled in EXSC 412 and EXSC 450 at their own cost. More information will be provided to students in the upper level EXSC courses.
  - c. EXSC 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

*Updated September 14, 2021*

## RELATED LINKS

Exercise Science - Pre-Occupational Therapy, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/exercise-science-pre-occupational-therapy/>)

Exercise Science Program Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/exercise-science/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT – EXERCISE SCIENCE

#### 1<sup>st</sup> Major: Exercise Science

- Overall GPA: 2.00 or higher
- Major GPA (includes Major Requirements and College Wide Requirements): 2.00 or higher

#### 2<sup>nd</sup> Major: Pre-OT SRU 3+3 Exercise Science

- Overall GPA: 3.00 or higher

## SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	44
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	45
	Natural Science and Math College-Wide Requirements	15
	Additional Occupational Therapy Prerequisite Courses	15
	Electives	12

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the 1<sup>st</sup> year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.

## ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
BIOL 209		4
<i>Physical Science Inquiry</i>		
PHYS 201	Elements of Physics I with Lab	4
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2,3</sup>		12
<b>Total Hours</b>		<b>44</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

<sup>3</sup> Additional Occupational Therapy prerequisite courses may be fulfilled in a Thematic Thread.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## MAJOR REQUIREMENTS

- If you choose to pursue Pre-Occupational Therapy SRU 3+3 Exercise Science and are not accepted into the OTD program, then EXSC 450: Internship is required to complete a first major of Exercise Science. Please refer to the Exercise Science Curriculum Guide.

Code	Title	Hours
<b>Required Basic Courses</b>		
Must earn a "C" or better in the following courses		
EXSC 100	Introduction to Exercise Science: Careers and Content <sup>1,2</sup>	3
EXSC 101	Applied Anatomy/Lab <sup>1,2</sup>	3
EXSC 201	Exercise Physiology with Lab <sup>1,2</sup>	3
EXSC 202	Biomechanics with Lab <sup>1,2</sup>	3
EXSC 300	Research Methods in Exercise Science <sup>1,2</sup>	3
EXSC 301	Aerobic Exercise Leadership <sup>1,2</sup>	3
EXSC 302	Exercise Leadership: Resistance Training <sup>1,2</sup>	3
Subtotal		21

## Required Upper Level Courses (24 credits if accepted to SRU OT Program)

Must earn a "C" or better in the following courses

EXSC 400	Wellness coaching and Program Management <sup>1,2</sup>	3
EXSC 401	Fitness Assessment <sup>1,2</sup>	3
EXSC 402	Exercise Prescription <sup>1,2</sup>	3
EXSC 403	Advanced Exercise Physiology <sup>1,2</sup>	3
EXSC 410	Clinical Exercise Physiology <sup>1,2</sup>	3
EXSC 411	Exercise Science: Special Populations and Conditions <sup>1,2</sup>	3
EXSC 412	Exercise Science: Senior Synthesis <sup>1,2</sup>	3
EXSC 424	Nutrition and Exercise <sup>1,2</sup>	3
Subtotal		24
<b>Total Hours</b>		<b>45</b>

<sup>1</sup> Course counts toward Major GPA<sup>2</sup> Course counts for 50% of Major requirements

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## NATURAL SCIENCE AND MATH COLLEGE-WIDE REQUIREMENTS

Code	Title	Hours
Must earn a "C" or better in the following courses		
BIOL 209		4
BIOL 309		4
PHYS 201	Elements of Physics I with Lab <sup>1</sup>	4
STAT 152	Elementary Statistics I <sup>1</sup>	3
<b>Total Hours</b>		<b>15</b>

<sup>1</sup> Course counts toward Major GPA

## ADDITIONAL OCCUPATIONAL THERAPY PREREQUISITE COURSES

Code	Title	Hours
EXSC 250	Medical Terminology	3
or HCAM 250	Medical Terminology for Healthcare Administrators	
PSYC 105	Introduction to Psychology	3
PSYC 244	Developmental Psychology	3
PSYC 276	Introduction to Abnormal Psychology	3
Additional Sociology or Anthropology Course		3
<b>Total Hours</b>		<b>15</b>

## Doctor of Occupational Therapy (OTD) Prerequisite Admission Requirements – Pre-Occupational Therapy SRU 3+3

### For Application Requirements

Please refer to Slippery Rock University's Occupational Therapy Studies (Master of Science in Occupational Therapy Studies) website for requirements: <http://www.sru.edu/OT> (<http://www.sru.edu/OT/>)

### Rock Studies 2

Code	Title	Hours
<b>Prerequisite Courses - SRU Occupational Therapy</b>		
BIOL 209		4

BIOL 309		4
EXSC 250	Medical Terminology	3
or HCAM 250	Medical Terminology for Healthcare Administrators	
PHYS 201	Elements of Physics I with Lab	4
or PE 364	Biomechanics of Individuals with Disabilities	
STAT 152	Elementary Statistics I	3
PSYC 105	Introduction to Psychology	3
PSYC 244	Developmental Psychology	3
PSYC 276	Introduction to Abnormal Psychology	3
Anthropology or Sociology <sup>1</sup>		3
INDP 106	Race and Ethnic Diversity in the USA	
INDP 202	Introduction to Anthropology	
INDP 211	Biological Anthropology	
INDP 309	Health and Society	
INDP 310	Cultural Area Studies	
INDP 321	Minority Groups	
INDP 324	The Family	
INDP 326	Society, Culture and Self	
INDP 339	Gender Roles and Society	
INDP 342	Sociology of Aging	
RCTH 120	Disability, Community Inclusion, and Diversity	
SOWK 105	Human Diversity	
Research Methods - Select One: <sup>1</sup>		3
EXSC 300	Research Methods in Exercise Science	
HCAM 499	Health Care Theory and Research Capstone Seminar	
INDP 318	Research Methods in Interdisciplinary Studies	
PSYC 231/232	Psychological Science I: Research Methods	
SOWK 318	Research Methods	
<b>Total Hours</b>		<b>33</b>

<sup>1</sup> Select one course. See *My Rock Audit* for specific courses.

### Pre-Occupational Therapy SRU 3+3

If any of these requirements are not met, the 3+3 designation will be removed from the student's record:

1. A 3.0 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Occupational Therapy SRU 3+3 program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

### Provision

Should a Pre-Occupational Therapy SRU 3+3 student be unsuccessful in completing the 1<sup>st</sup> two semesters (summer or fall) of the Occupational Therapy Program and wants to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, Occupational Therapy courses will count toward the completion of his/her undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the Doctor of Occupational Therapy Program with an earned Bachelor's degree.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

EXERCISE SCIENCE - BS (6149)

PRE-OT SRU 3+3 (6EOT)

This program is effective as of Summer 2022

Revised 06.09.2022

UCC 03.01.2022

## RECOMMENDED THREE-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
Select one of the following:		3
EXSC 100	Introduction to Exercise Science: Careers and Content	3
EXSC 101	Applied Anatomy/Lab <sup>3</sup>	
PHYS 201	Elements of Physics I with Lab <sup>1,3</sup>	4
PSYC 105	Introduction to Psychology <sup>1</sup>	3
SUBJ 139	Foundations of Academic Discovery <sup>2</sup>	3
Rock Studies 2 Requirement (p. 29)		3
ESAP 101	FIRST Seminar <sup>8</sup>	1
<b>Hours</b>		<b>20</b>
<b>Spring</b>		
Select one of the following:		3
EXSC 100	Introduction to Exercise Science: Careers and Content <sup>3</sup>	
EXSC 101	Applied Anatomy/Lab <sup>3</sup>	
STAT 152	Elementary Statistics I <sup>1,3</sup>	3
Rock Studies 2 Requirement (p. 29)		9
Computer Competency Course (only if needed)		0-1
<b>Hours</b>		<b>15-16</b>
<b>Second Year</b>		
<b>Fall</b>		
EXSC 201	Exercise Physiology with Lab <sup>3</sup>	3
EXSC 202	Biomechanics with Lab <sup>3</sup>	3
BIOL 209	Human Anatomy & Physiology I <sup>1,3</sup>	4
PSYC 244	Developmental Psychology	3
Rock Studies 2 Requirement (p. 29)		3
Sociology or Anthropology Course (See My Rock Audit for options)		3
<b>Hours</b>		<b>19</b>
<b>Spring</b>		
EXSC 300	Research Methods in Exercise Science <sup>3</sup>	3
EXSC 301	Aerobic Exercise Leadership <sup>3</sup>	3

EXSC 302	Exercise Leadership: Resistance Training <sup>3</sup>	3
EXSC 250 or HCAM 250	Medical Terminology or Medical Terminology for Healthcare Administrators	3
BIOL 309	Human Anatomy & Physiology II <sup>3</sup>	4
Rock Studies 2 Requirement (p. 29)		3
<b>Hours</b>		<b>19</b>
<b>Third Year</b>		
<b>Fall</b>		
EXSC 400	Wellness coaching and Program Management <sup>3</sup>	3
EXSC 401	Fitness Assessment <sup>3</sup>	3
EXSC 402	Exercise Prescription <sup>3</sup>	3
EXSC 403	Advanced Exercise Physiology <sup>3</sup>	3
PSYC 276	Introduction to Abnormal Psychology	3
Rock Studies 2 Requirement (p. 29)		3
<b>Hours</b>		<b>18</b>
<b>Spring</b>		
EXSC 410	Clinical Exercise Physiology <sup>3</sup>	3
EXSC 411	Exercise Science: Special Populations and Conditions <sup>3</sup>	3
EXSC 412	Exercise Science: Senior Synthesis <sup>3</sup>	3
Select one of the following:		3
EXSC 424	Nutrition and Exercise <sup>3</sup>	
HLTH 424	Nutrition and Exercise <sup>3</sup>	
Rock Studies 2 Requirement (p. 29)		6
<b>Hours</b>		<b>18</b>
<b>Fourth Year</b>		
<b>Fall</b>		
<b>Senior Year: If not accepted into SRU OTD<sup>4</sup></b>		
EXSC 450	Exercise Science Internship <sup>3,5</sup>	12
<b>Hours</b>		<b>12</b>
<b>Total Hours**</b>		<b>121-122</b>

<sup>1</sup> Course satisfies majors and Rock Studies 2 requirements.

<sup>2</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>3</sup> Must earn a "C" or better in the course.

<sup>4</sup> **Senior Year- If not accepted into SRU OTD:** If you choose to pursue Exercise Science 3+3 and are not accepted into graduate SRU OTD, then EXSC 450: Exercise Science Internship (12 credits) is required to complete a first major of Exercise Science. Please refer to the Exercise Science Curriculum Guide.

<sup>5</sup> Students must complete this 12 credit requirement by registering for two sections of this 6-cr hour course in the same semester

\* Students are encouraged to take ESAP 101 as a Free Elective.

Students must meet all Exercise Science 3+3 major requirements, SRU Occupational Therapy Doctorate (OTD) Program prerequisites, and rock studies 2 requirements to apply.

**Senior Year- If accepted into the SRU OTD:** The first year will count as the 4th year of the Exercise Science program. Upon successful completion of the first year of the SRU OTD, students will graduate with a BS in Exercise Science. Should an Exercise Science 3+3 student be unsuccessful in completing the 1<sup>st</sup> year of the SRU OTD and wants to complete their

original undergraduate degree, it is solely up to the discretion of their undergraduate program Department Chair to determine which, if any Occupational Therapy courses will count toward the completion of their undergraduate degree. In addition, students must complete EXSC 450: Exercise Science Internship (12 credits).

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

Major Code: 6149

Pre-Occupational Therapy 3+3 (6EOT)

Revised: 02.10.2023

## Exercise Science, Bachelor of Science (BS) / Pre-Occupational Therapy (SRU) (Traditional)

### EXERCISE SCIENCE PROGRAM LEARNING OUTCOMES

- **Professional Competence:** To utilize knowledge, skills, and abilities to evaluate health behavior and risk factors; develop, implement, and evaluate evidence-based exercise and wellness programs, and employ behavioral strategies to motivate individuals to adopt and maintain positive lifestyle behaviors. UO 3,4,5
- **Professional Interaction and Communication:** To interact and communicate effectively by presenting information in oral and written formats, collaborating with professionals and peers, expressing ideas clearly, and giving and receiving feedback. UO 1
- **Professional Behavior and Involvement:** To model professional behaviors (including preparedness, engagement, and appearance), and demonstrate professional involvement across the major. UO 5,7,9
- **Ethical Reasoning:** To make well-informed and unbiased decisions to enhance the well-being of others. UO 8,10
- **Critical Thinking:** To demonstrate clear and accurate reasoning to make decisions and solve problems. UO 2

### What are your options?

**Pre-Occupational Therapy SRU 3+3:** Earn a Doctor of Occupational Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU OTD program. At the end of your second year, you apply for admission into the SRU OTD program. If accepted, your first year in the SRU OTD program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Occupational Therapy (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU OTD program and apply to the SRU OTD program in your senior year.

## Academic Policies for Students in the Exercise Science Major

*Effective for all Exercise Science Majors beginning Spring 2021*

1. Policy for earning acceptable grades in the Exercise Science program:
  - a. A student must earn a grade of "C" or better in ALL Required Basic Courses (EXSC 100's, EXSC 200's, EXSC 300's) and Required Upper Level Courses (EXSC 400's, EXSC 410's, EXSC 424, EXSC 450).
  - b. A student must earn a grade of "C" or better in ALL Natural Science and Math College-Wide Requirements (BIOL 209, BIOL 309, BIOL 216, BIOL 217, STAT 152, PHYS 201).
  - c. The Exercise Science curriculum is structured with pre-requisites. A student must earn a "C" or better in the pre-requisite course to be able to take the next course. See course catalog for pre-requisites.
  - d. If a student does not earn a "C" or better, they will be required to:
    - i. Retake the course
    - ii. They will be dropped from any course(s) in the following semester that requires a "C" or better as a pre-requisite (see course catalog for pre-requisites)
    - iii. Students will need to meet with their Academic Advisor and change their schedule accordingly
2. SRU has a *Repeat of Courses Policy* as follows and it can be found in the course catalog: Repeat of Courses < Slippery Rock University (sru.edu) (<https://catalog.sru.edu/archive/2022-2023/academic-policies/repeat-of-courses/>)
  - a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade.

Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis.

Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades.

In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for post-baccalaureate students is the same as the undergraduate student policy.
3. Once the student has exceeded the *SRU Repeat of Courses Policy*, the student will have their major changed to Exploratory and EXSC - Exercise Science Major courses will be removed from their schedule.



4. Policy for changing to the Exercise Science major:
  - a. A Slippery Rock University student wishing to change their major to Exercise Science MUST have an overall GPA of 2.00.
  - b. A transfer student who enters from another University must have an overall GPA of 2.00.
5. Additional costs associated with the Exercise Science major:
  - a. Lab fees will be collected for exercise science classes with a lab component. This fee enhances the department's ability to offer a high-quality program.
  - b. A student in the Exercise Science major is required to maintain current CPR/AED, First Aid, and Student Professional Liability Insurance while enrolled in EXSC 412 and EXSC 450 at their own cost. More information will be provided to students in the upper level EXSC courses.
  - c. EXSC 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

*Updated September 14, 2021*

## RELATED LINKS

Exercise Science - Pre-Occupational Therapy, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/exercise-science-pre-occupational-therapy/>)

Exercise Science Program Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/exercise-science/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT - EXERCISE SCIENCE

Overall GPA: 2.00 or higher

Major GPA (includes Major Requirements and College Wide Requirements): 2.00 or higher

### SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	44
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	57
	Natural Science and Math College-Wide Requirements	15
	Additional Occupational Therapy Prerequisite Courses	15
	Electives	0

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
BIOL 209		4
<i>Physical Science Inquiry</i>		
PHYS 201	Elements of Physics I with Lab	4
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2,3</sup>		12
<b>Total Hours</b>		<b>44</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

<sup>3</sup> Additional Occupational Therapy prerequisite courses may be fulfilled in a Thematic Thread.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		

Select one of the following at SRU or another post-secondary institution:

CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## MAJOR REQUIREMENTS

- 29 major credits must be taken at SRU or PASSHE
- 29 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Basic Courses</b>		
Must earn a "C" or better in the following courses		
EXSC 100	Introduction to Exercise Science: Careers and Content <sup>1,2</sup>	3
EXSC 101	Applied Anatomy/Lab <sup>1,2</sup>	3
EXSC 201	Exercise Physiology with Lab <sup>1,2</sup>	3
EXSC 202	Biomechanics with Lab <sup>1,2</sup>	3
EXSC 300	Research Methods in Exercise Science <sup>1,2</sup>	3
EXSC 301	Aerobic Exercise Leadership <sup>1,2</sup>	3
EXSC 302	Exercise Leadership: Resistance Training <sup>1,2</sup>	3
Subtotal		21
<b>Required Upper Level Courses</b>		
Must earn a "C" or better in the following courses		
EXSC 400	Wellness coaching and Program Management <sup>1,2</sup>	3
EXSC 401	Fitness Assessment <sup>1,2</sup>	3
EXSC 402	Exercise Prescription <sup>1,2</sup>	3
EXSC 403	Advanced Exercise Physiology <sup>1,2</sup>	3
EXSC 410	Clinical Exercise Physiology <sup>1,2</sup>	3
EXSC 411	Exercise Science: Special Populations and Conditions <sup>1,2</sup>	3
EXSC 412	Exercise Science: Senior Synthesis <sup>1,2</sup>	3
EXSC 424	Nutrition and Exercise <sup>1,2</sup>	3
EXSC 450	Exercise Science Internship <sup>1,2</sup>	6
EXSC 450	Exercise Science Internship <sup>1,2</sup>	6
Subtotal		36
<b>Total Hours</b>		<b>57</b>

<sup>1</sup> Course counts toward Major GPA

<sup>2</sup> Course counts for 50% of Major requirements

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## NATURAL SCIENCE AND MATH COLLEGE-WIDE REQUIREMENTS

Code	Title	Hours
Must earn a "C" or better in the following courses		
BIOL 209		4
BIOL 309		4
PHYS 201	Elements of Physics I with Lab <sup>1</sup>	4
STAT 152	Elementary Statistics I <sup>1</sup>	3
<b>Total Hours</b>		<b>15</b>

<sup>1</sup> Course counts toward Major GPA

## ADDITIONAL OCCUPATIONAL THERAPY PREREQUISITE COURSES

Code	Title	Hours
EXSC 250	Medical Terminology	3
or HCAM 250	Medical Terminology for Healthcare Administrators	
PSYC 105	Introduction to Psychology	3
PSYC 244	Developmental Psychology	3
PSYC 276	Introduction to Abnormal Psychology	3
Additional Sociology or Anthropology Course		3

## Doctor of Occupational Therapy (OTD) Prerequisite Admission Requirements

### For Application Requirements

Please refer to Slippery Rock University's Occupational Therapy Studies (Master of Science in Occupational Therapy Studies) website for requirements: <http://www.sru.edu/OT> (<http://www.sru.edu/OT/>)

### Rock Studies 2

Code	Title	Hours
<b>Prerequisite Courses - SRU Occupational Therapy</b>		
BIOL 209		4
BIOL 309		4
EXSC 250	Medical Terminology	3
or HCAM 250	Medical Terminology for Healthcare Administrators	
PHYS 201	Elements of Physics I with Lab	4
or PE 364	Biomechanics of Individuals with Disabilities	
STAT 152	Elementary Statistics I	3
PSYC 105	Introduction to Psychology	3
PSYC 244	Developmental Psychology	3
PSYC 276	Introduction to Abnormal Psychology	3
Research Methods - Select One: <sup>1</sup>		3
EXSC 300	Research Methods in Exercise Science	
HCAM 499	Health Care Theory and Research Capstone Seminar	
INDP 318	Research Methods in Interdisciplinary Studies	
PSYC 231 & PSYC 232	Psychological Science I: Research Methods and Psychological Science II: Statistical Applications	
SOWK 318	Research Methods	
Anthropology or Sociology - Select One: <sup>1</sup>		3

INDP 106	Race and Ethnic Diversity in the USA
INDP 202	Introduction to Anthropology
INDP 211	Biological Anthropology
INDP 309	Health and Society
INDP 310	Cultural Area Studies
INDP 321	Minority Groups
INDP 324	The Family
INDP 326	Society, Culture and Self
INDP 339	Gender Roles and Society
INDP 342	Sociology of Aging
RCTH 120	Disability, Community Inclusion, and Diversity
SOWK 105	Human Diversity
<b>Total Hours</b>	<b>33</b>

<sup>1</sup> Select one course. See *My Rock Audit* for specific courses.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

EXERCISE SCIENCE - BS (6149)

PRE-OT (SRU Traditional)

Effective Summer 2022

Revised 06.09.2022

UCC 03.01.2022

## RECOMMENDED FOUR-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
Select one of the following:		3
EXSC 100	Introduction to Exercise Science: Careers and Content <sup>3</sup>	
EXSC 101	Applied Anatomy/Lab <sup>3</sup>	
PHYS 201	Elements of Physics I with Lab <sup>1,3</sup>	4
PSYC 105	Introduction to Psychology <sup>1</sup>	3
SUBJ 139	Foundations of Academic Discovery <sup>2</sup>	3
Rock Studies 2 Requirement (p. 29)		3
ESAP 101	FYRST Seminar *	1
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
Select one of the following:		3
EXSC 100	Introduction to Exercise Science: Careers and Content <sup>3</sup>	
EXSC 101	Applied Anatomy/Lab <sup>3</sup>	
STAT 152	Elementary Statistics I <sup>1,3</sup>	3

Rock Studies 2 Requirement (p. 29)	9
Computer Competency Course (only if needed)	0-1
<b>Hours</b>	<b>15-16</b>

### Second Year

#### Fall

Select one of the following:		3
EXSC 201	Exercise Physiology with Lab <sup>3</sup>	
EXSC 202	Biomechanics with Lab <sup>3</sup>	
BIOL 209	Human Anatomy & Physiology I <sup>1,3</sup>	4
PSYC 244	Developmental Psychology	3
Rock Studies 2 Requirement (p. 29)		3
Sociology or Anthropology Course (See My Rock Audit for options)		3

**Hours 16**

#### Spring

Select one of the following:		3
EXSC 201	Exercise Physiology with Lab <sup>3</sup>	
EXSC 202	Biomechanics with Lab <sup>3</sup>	
BIOL 309	Human Anatomy & Physiology II <sup>3</sup>	4
Rock Studies 2 Requirement OR Elective (p. 29)		6
EXSC 250 or HCAM 250	Medical Terminology or Medical Terminology for Healthcare Administrators	3
<b>Hours</b>		<b>16</b>

### Third Year

#### Fall

EXSC 300	Research Methods in Exercise Science <sup>3</sup>	3
EXSC 301	Aerobic Exercise Leadership <sup>3</sup>	3
EXSC 302	Exercise Leadership: Resistance Training <sup>3</sup>	3
PSYC 276	Introduction to Abnormal Psychology	3
Rock Studies 2 Requirement OR Elective (p. 29)		3

**Hours 15**

#### Spring

EXSC 400	Wellness coaching and Program Management <sup>3</sup>	3
EXSC 401	Fitness Assessment <sup>3</sup>	3
EXSC 402	Exercise Prescription <sup>3</sup>	3
EXSC 403	Advanced Exercise Physiology <sup>3</sup>	3
Rock Studies 2 Requirement OR Elective (p. 29)		3
<b>Hours</b>		<b>15</b>

### Fourth Year

#### Fall

EXSC 410	Clinical Exercise Physiology <sup>3</sup>	3
EXSC 411	Exercise Science: Special Populations and Conditions <sup>3</sup>	3
EXSC 412	Exercise Science: Senior Synthesis <sup>3</sup>	3
Select one of the following:		3
EXSC 424	Nutrition and Exercise <sup>3</sup>	
HLTH 424	Nutrition and Exercise <sup>3</sup>	
Rock Studies 2 Requirement (p. 29)		3

**Hours 15**

**Spring**

EXSC 450	Exercise Science Internship <sup>3,4,5</sup>	12
<b>Hours</b>		<b>12</b>
<b>Total Hours**</b>		<b>121-122</b>

**SRU Occupational Therapy Program begins in the Summer.**

- <sup>1</sup> Course satisfies majors and Rock Studies 2 requirements.
- <sup>2</sup> Course offered in multiple subjects; cannot take course in first major subject
- <sup>3</sup> Must earn a grade of "C" or better
- <sup>4</sup> EXSC 450: Exercise Science Internship may be scheduled Only after all prerequisites are met. Also required are a valid First Aid, CPR/AED certification and proof of student professional liability insurance. EXSC 412 provides all necessary information pertaining to the internship registration process and is taken the semester prior to internship.
- <sup>5</sup> Students must complete this 12 credit requirement by registering for two sections of this 6-cr hour course in the same semester
- \* Students are encouraged to take ESAP 101 as a Free Elective.

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

Major Code: 6149

Pre-Occupational Therapy SRU Traditional (PY)

Revised: 02.10.2023

## Exercise Science, Bachelor of Science (BS) / Pre-Physical Therapy (SRU) (3+3)

### EXERCISE SCIENCE PROGRAM LEARNING OUTCOMES

- **Professional Competence:** To utilize knowledge, skills, and abilities to evaluate health behavior and risk factors; develop, implement, and evaluate evidence-based exercise and wellness programs, and employ behavioral strategies to motivate individuals to adopt and maintain positive lifestyle behaviors. UO 3,4,5
- **Professional Interaction and Communication:** To interact and communicate effectively by presenting information in oral and written formats, collaborating with professionals and peers, expressing ideas clearly, and giving and receiving feedback. UO 1
- **Professional Behavior and Involvement:** To model professional behaviors (including preparedness, engagement, and appearance), and demonstrate professional involvement across the major. UO 5,7,9
- **Ethical Reasoning:** To make well-informed and unbiased decisions to enhance the well-being of others. UO 8,10
- **Critical Thinking:** To demonstrate clear and accurate reasoning to make decisions and solve problems. UO 2

## What are your options?

**Pre-Physical Therapy SRU 3+3:** Earn a Doctor of Physical Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU DPT program. During your third undergraduate year, you apply for admission into the SRU DPT program. If accepted, your first year in the SRU DPT program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Physical Therapy (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU DPT program and apply to the SRU DPT program in your senior year.

## Academic Policies for Students in the Exercise Science Major

*Effective for all Exercise Science Majors beginning Spring 2021*

1. Policy for earning acceptable grades in the Exercise Science program:
  - a. A student must earn a grade of "C" or better in ALL Required Basic Courses (EXSC 100's, EXSC 200's, EXSC 300's) and Required Upper Level Courses (EXSC 400's, EXSC 410's, EXSC 424, EXSC 450).
  - b. A student must earn a grade of "C" or better in ALL Natural Science and Math College-Wide Requirements (BIOL 209, BIOL 309, BIOL 216, BIOL 217, STAT 152, PHYS 201).
  - c. The Exercise Science curriculum is structured with pre-requisites. A student must earn a "C" or better in the pre-requisite course to be able to take the next course. See course catalog for pre-requisites.
  - d. If a student does not earn a "C" or better, they will be required to:
    - i. Retake the course
    - ii. They will be dropped from any course(s) in the following semester that requires a "C" or better as a pre-requisite (see course catalog for pre-requisites)
    - iii. Students will need to meet with their Academic Advisor and change their schedule accordingly
2. SRU has a *Repeat of Courses Policy* as follows and it can be found in the course catalog: Repeat of Courses < Slippery Rock University (sru.edu) (<https://catalog.sru.edu/archive/2022-2023/academic-policies/repeat-of-courses/>)
  - a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade.

Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis.

Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades.

In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for post-baccalaureate students is the same as the undergraduate student policy.

3. Once the student has exceeded the *SRU Repeat of Courses Policy*, the student will have their major changed to Exploratory and EXSC - Exercise Science Major courses will be removed from their schedule.
4. Policy for changing to the Exercise Science major:
  - a. A Slippery Rock University student wishing to change their major to Exercise Science MUST have an overall GPA of 2.00.
  - b. A transfer student who enters from another University must have an overall GPA of 2.00.
5. Additional costs associated with the Exercise Science major:
  - a. Lab fees will be collected for exercise science classes with a lab component. This fee enhances the department's ability to offer a high-quality program.
  - b. A student in the Exercise Science major is required to maintain current CPR/AED, First Aid, and Student Professional Liability Insurance while enrolled in EXSC 412 and EXSC 450 at their own cost. More information will be provided to students in the upper level EXSC courses.
  - c. EXSC 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

*Updated September 14, 2021*

## RELATED LINKS

Exercise Science - Pre-Physical Therapy, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/exercise-science-pre-physical-therapy/>)

Exercise Science Program Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/exercise-science/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT – EXERCISE SCIENCE

#### 1<sup>st</sup> Major: Exercise Science

- Overall GPA: 2.00 or higher
- Major GPA (includes Major Requirements and College Wide Requirements): 2.00 or higher

#### 2<sup>nd</sup> Major: Pre-PT SRU 3+3 Exercise Science

- Overall GPA: 3.00 or higher

### SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	44
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	45
	Natural Science and Math College-Wide Requirements	15
	Additional Physical Therapy Prerequisite Courses	18
	Electives	9

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the 1<sup>st</sup> year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.

### ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
BIOL 209		4
<i>Physical Science Inquiry</i>		
PHYS 201	Elements of Physics I with Lab	4
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2,3</sup>		12
<b>Total Hours</b>		<b>44</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.



<sup>3</sup> Additional Physical Therapy prerequisite courses may be fulfilled in a Thematic Thread.

Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
Total Hours		0-3

Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
Total Hours		0-3

DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

MAJOR REQUIREMENTS

- If you choose to pursue Pre-Physical Therapy SRU 3+3 Exercise Science and are not accepted into the DPT program, then EXSC 450: Internship is required to complete a first major of Exercise Science. Please refer to the Exercise Science Curriculum Guide.

Code	Title	Hours
Required Basic Courses		
Must earn a "C" or better in the following courses		
EXSC 100	Introduction to Exercise Science: Careers and Content <sup>1,2</sup>	3
EXSC 101	Applied Anatomy/Lab <sup>1,2</sup>	3
EXSC 201	Exercise Physiology with Lab <sup>1,2</sup>	3
EXSC 202	Biomechanics with Lab <sup>1,2</sup>	3
EXSC 300	Research Methods in Exercise Science <sup>1,2</sup>	3
EXSC 301	Aerobic Exercise Leadership <sup>1,2</sup>	3
EXSC 302	Exercise Leadership: Resistance Training <sup>1,2</sup>	3
Subtotal		21
Required Upper Level Courses (24 credits if accepted to SRU DPT Program)		
Must earn a "C" or better in the following courses		

EXSC 400	Wellness coaching and Program Management <sup>1,2</sup>	3
EXSC 401	Fitness Assessment <sup>1,2</sup>	3
EXSC 402	Exercise Prescription <sup>1,2</sup>	3
EXSC 403	Advanced Exercise Physiology <sup>1,2</sup>	3
EXSC 410	Clinical Exercise Physiology <sup>1,2</sup>	3
EXSC 411	Exercise Science: Special Populations and Conditions <sup>1,2</sup>	3
EXSC 412	Exercise Science: Senior Synthesis <sup>1,2</sup>	3
EXSC 424	Nutrition and Exercise <sup>1,2</sup>	3
Subtotal		24
Total Hours		45

- <sup>1</sup> Course counts toward Major GPA
- <sup>2</sup> Course counts for 50% of Major requirements
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

NATURAL SCIENCE AND MATH COLLEGE-WIDE REQUIREMENTS

Code	Title	Hours
Must earn a "C" or better in the following courses		
BIOL 209		4
BIOL 309		4
PHYS 201	Elements of Physics I with Lab <sup>1</sup>	4
STAT 152	Elementary Statistics I <sup>1</sup>	3
Total Hours		15

- <sup>1</sup> Course counts toward Major GPA

ADDITIONAL PHYSICAL THERAPY PREREQUISITE COURSES

Code	Title	Hours
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
PHYS 202	Elements of Physics II/ Lab	4
PSYC 105	Introduction to Psychology	3
PSYC	Additional PSYC Course (see Rock Audit)	3
Total Hours		18

Doctor of Physical Therapy (DPT)  
Prerequisite Admission Requirements – Pre-Physical Therapy SRU 3+3  
For Application Requirements  
Please refer to Slippery Rock University's Physical Therapy (Doctor of Physical Therapy) website for requirements: [www.sru.edu/PT/](http://www.sru.edu/PT/) (<http://www.sru.edu/PT/>).

Rock Studies 2

Code	Title	Hours
Prerequisite Courses - SRU Physical Therapy		
Select one of the following:		6-8

BIOL 209 & BIOL 309	and	
BIOL 340 & BIOL 410	Vertebrate Anatomy with Lab and Animal Physiology with Lab	
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
Select one of the following:		8
PHYS 201 & PHYS 202	Elements of Physics I with Lab and Elements of Physics II/ Lab	
PHYS 216 & PHYS 217	University Physics 1 with Lab and University Physics 2 with Lab	
STAT 152 or BIOL 325	Elementary Statistics I Biometry with Lab	3
PSYC 105	Introduction to Psychology	3
Additional Psychology Course <sup>1</sup>		3
<b>Total Hours</b>		<b>31-33</b>

<sup>1</sup> See My Rock Audit for specific courses.

### Requirements for Pre-Physical Therapy SRU 3+3

If any of these requirements are not met, the 3+3 designation will be removed from the student's record:

1. A 3.0 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Physical Therapy SRU 3+3 program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

### Provision

Should a Pre-Physical Therapy SRU 3+3 student be unsuccessful in completing the 1st two semesters (fall or spring) of the Doctor of Physical Therapy Program and wants to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, Physical Therapy courses will count toward the completion of his/her undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the Doctor of Physical Therapy Program with an earned Bachelor's degree.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

EXERCISE SCIENCE - BS (6149)

PRE-PT SRU 3+3 (61P9)

This program is effective as of Summer 2022

Revised 06.10.2022

UCC 03.01.2022

## RECOMMENDED THREE-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
Select one of the following:		3
EXSC 100	Introduction to Exercise Science: Careers and Content <sup>3</sup>	
EXSC 101	Applied Anatomy/Lab <sup>3</sup>	
PHYS 201	Elements of Physics I with Lab <sup>1,3</sup>	4
PSYC 105	Introduction to Psychology <sup>1</sup>	3
SUBJ 139	Foundations of Academic Discovery <sup>2</sup>	3
Rock Studies 2 Requirement (p. 29)		3
ESAP 101	FYRST Seminar *	1
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
Select one of the following:		3
EXSC 100	Introduction to Exercise Science: Careers and Content <sup>3</sup>	
EXSC 101	Applied Anatomy/Lab <sup>3</sup>	
PHYS 202	Elements of Physics II/ Lab	4
STAT 152	Elementary Statistics I <sup>1,3</sup>	3
Rock Studies 2 Requirement (p. 29)		6
Computer Competency Course (only if needed)		0-1
<b>Hours</b>		<b>16-17</b>
<b>Second Year</b>		
<b>Fall</b>		
EXSC 201	Exercise Physiology with Lab <sup>3</sup>	3
EXSC 202	Biomechanics with Lab <sup>3</sup>	3
BIOL 209	Human Anatomy & Physiology I <sup>1,3</sup>	4
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
Rock Studies 2 Requirement (p. 29)		6
*Additional credits beyond 18 requires an extra fee.		
<b>Hours</b>		<b>20</b>
<b>Spring</b>		
EXSC 300	Research Methods in Exercise Science <sup>3</sup>	3
EXSC 301	Aerobic Exercise Leadership <sup>3</sup>	3
EXSC 302	Exercise Leadership: Resistance Training <sup>3</sup>	3
BIOL 309	Human Anatomy & Physiology II <sup>3</sup>	4
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
Rock Studies 2 Requirement (p. 29)		3
*Additional credits beyond 18 requires an extra fee		
<b>Hours</b>		<b>20</b>
<b>Third Year</b>		
<b>Fall</b>		
EXSC 400	Wellness coaching and Program Management <sup>3</sup>	3
EXSC 401	Fitness Assessment <sup>3</sup>	3
EXSC 402	Exercise Prescription <sup>3</sup>	3
EXSC 403	Advanced Exercise Physiology <sup>3</sup>	3
Psychology Course (See My Rock Audit for options)		3

Rock Studies 2 Requirement (p. 29)		3
<b>Hours</b>		<b>18</b>
<b>Spring</b>		
EXSC 410	Clinical Exercise Physiology <sup>3</sup>	3
EXSC 411	Exercise Science: Special Populations and Conditions <sup>3</sup>	3
EXSC 412	Exercise Science: Senior Synthesis <sup>3</sup>	3
Select one of the following:		3
EXSC 424	Nutrition and Exercise <sup>3</sup>	
HLTH 424	Nutrition and Exercise <sup>3</sup>	
Rock Studies 2 Requirement (p. 29)		6
<b>Hours</b>		<b>18</b>
<b>Fourth Year</b>		
<b>Fall</b>		
<b>Senior Year: If not accepted into SRU DPT<sup>4</sup></b>		
EXSC 450	Exercise Science Internship <sup>3,5</sup>	12
<b>Hours</b>		<b>12</b>
<b>Total Hours**</b>		<b>121-122</b>

<sup>1</sup> Course satisfies majors and Rock Studies 2 requirements.

<sup>2</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>3</sup> Must earn a "C" or better in the course.

<sup>4</sup> **Senior Year- If not accepted into SRU DPT:** If you choose to pursue Exercise Science 3+3 and are not accepted into SRU DPT Graduate Program, then EXSC 450: Exercise Science Internship (12 credits) is required to complete a first major of Exercise Science. Please refer to the Exercise Science Curriculum Guide.

<sup>5</sup> Students must complete this 12 credit requirement by registering for two sections of this 6-cr hour course in the same semester

\* Students are encouraged to take ESAP 101 as a Free Elective.

Students must meet all Exercise Science 3+3 major requirements, SRU Doctorate of Physical Therapy (DPT) Program prerequisites, and Rock Studies 2 requirements to apply.

**Senior Year- If accepted into the SRU DPT:** The first year will count as the 4th year of the Exercise Science program. Upon successful completion of the first year of the SRU DPT Graduate Program, students will graduate with a BS in Exercise Science. Should an Exercise Science 3+3 student be unsuccessful in completing the 1st year of the SRU DPT Graduate Program and wants to complete their original undergraduate degree, it is solely up to the discretion of their undergraduate program Department Chair to determine which, if any Physical Therapy courses will count toward the completion of their undergraduate degree. In addition, students must complete EXSC 450: Exercise Science Internship (12 credits).

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6149

Pre-Physical Therapy 3+3 (61P9)

Revised: 02.10.2023

## Exercise Science, Bachelor of Science (BS) / Pre-Physical Therapy (SRU) (Traditional)

### EXERCISE SCIENCE PROGRAM LEARNING OUTCOMES

- **Professional Competence:** To utilize knowledge, skills, and abilities to evaluate health behavior and risk factors; develop, implement, and evaluate evidence-based exercise and wellness programs, and employ behavioral strategies to motivate individuals to adopt and maintain positive lifestyle behaviors. UO 3,4,5
- **Professional Interaction and Communication:** To interact and communicate effectively by presenting information in oral and written formats, collaborating with professionals and peers, expressing ideas clearly, and giving and receiving feedback. UO 1
- **Professional Behavior and Involvement:** To model professional behaviors (including preparedness, engagement, and appearance), and demonstrate professional involvement across the major. UO 5,7,9
- **Ethical Reasoning:** To make well-informed and unbiased decisions to enhance the well-being of others. UO 8,10
- **Critical Thinking:** To demonstrate clear and accurate reasoning to make decisions and solve problems. UO 2

### What are your options?

**Pre-Physical Therapy SRU 3+3:** Earn a Doctor of Physical Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU DPT program. During your third undergraduate year, you apply for admission into the SRU DPT program. If accepted, your first year in the SRU DPT program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Physical Therapy (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU DPT program and apply to the SRU DPT program in your senior year.

### Academic Policies for Students in the Exercise Science Major

**Effective for all Exercise Science Majors beginning Spring 2021**

1. Policy for earning acceptable grades in the Exercise Science program:
  - a. A student must earn a grade of "C" or better in ALL Required Basic Courses (EXSC 100's, EXSC 200's, EXSC 300's) and Required Upper Level Courses (EXSC 400's, EXSC 410's, EXSC 424, EXSC 450).
  - b. A student must earn a grade of "C" or better in ALL Natural Science and Math College-Wide Requirements (BIOL 209, BIOL 309, BIOL 216, BIOL 217, STAT 152, PHYS 201).
  - c. The Exercise Science curriculum is structured with pre-requisites. A student must earn a "C" or better in the pre-requisite course to be able to take the next course. See course catalog for pre-requisites.
  - d. If a student does not earn a "C" or better, they will be required to:

- i. Retake the course
- ii. They will be dropped from any course(s) in the following semester that requires a "C" or better as a pre-requisite (see course catalog for pre-requisites)
- iii. Students will need to meet with their Academic Advisor and change their schedule accordingly

2. SRU has a *Repeat of Courses Policy* as follows and it can be found in the course catalog: Repeat of Courses < Slippery Rock University (sru.edu) (<https://catalog.sru.edu/archive/2022-2023/academic-policies/repeat-of-courses/>)
  - a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade.

Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis.

Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades.

In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for post-baccalaureate students is the same as the undergraduate student policy.

3. Once the student has exceeded the *SRU Repeat of Courses Policy*, the student will have their major changed to Exploratory and EXSC - Exercise Science Major courses will be removed from their schedule.
4. Policy for changing to the Exercise Science major:
  - a. A Slippery Rock University student wishing to change their major to Exercise Science MUST have an overall GPA of 2.00.
  - b. A transfer student who enters from another University must have an overall GPA of 2.00.
5. Additional costs associated with the Exercise Science major:
  - a. Lab fees will be collected for exercise science classes with a lab component. This fee enhances the department's ability to offer a high-quality program.
  - b. A student in the Exercise Science major is required to maintain current CPR/AED, First Aid, and Student Professional Liability Insurance while enrolled in EXSC 412 and EXSC 450 at their own cost. More information will be provided to students in the upper level EXSC courses.
  - c. EXSC 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific

certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

**Updated September 14, 2021**

## RELATED LINKS

Exercise Science - Pre-Physical Therapy, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/exercise-science-pre-physical-therapy/>)

Exercise Science Program Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/exercise-science/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT - EXERCISE SCIENCE

Overall GPA: 2.00 or higher

Major GPA (includes Major Requirements and College-Wide Requirements): 2.00 or higher

### SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	44
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	57
	Natural Science and Math College-Wide Requirements	15
	Additional Physical Therapy Prerequisite Courses	18
	Electives	0

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3

<i>Natural Sciences Inquiry</i>		
BIOL 209		4
<i>Physical Science Inquiry</i>		
PHYS 201	Elements of Physics I with Lab	4
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2,3</sup>		12
<b>Total Hours</b>		<b>44</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

<sup>3</sup> Additional Physical Therapy prerequisite courses may be fulfilled in a Thematic Thread.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## MAJOR REQUIREMENTS

- 29 major credits must be taken at SRU or PASSHE
- 29 major credits must be taken at the 300 level or above
- Students may choose to earn a BS in Exercise Science as preparation for graduate studies in many health care related fields. In this case, the student should learn what prerequisites are required for his/her

intended graduate program and take those courses as electives while completing the Exercise Science Program.

Code	Title	Hours
<b>Required Basic Courses</b>		
Must earn a "C" or better in the following courses		
EXSC 100	Introduction to Exercise Science: Careers and Content <sup>1,2</sup>	3
EXSC 101	Applied Anatomy/Lab <sup>1,2</sup>	3
EXSC 201	Exercise Physiology with Lab <sup>1,2</sup>	3
EXSC 202	Biomechanics with Lab <sup>1,2</sup>	3
EXSC 300	Research Methods in Exercise Science <sup>1,2</sup>	3
EXSC 301	Aerobic Exercise Leadership <sup>1,2</sup>	3
EXSC 302	Exercise Leadership: Resistance Training <sup>1,2</sup>	3
Subtotal		21
<b>Required Upper Level Courses</b>		
Must earn a "C" or better in the following courses		
EXSC 400	Wellness coaching and Program Management <sup>1,2</sup>	3
EXSC 401	Fitness Assessment <sup>1,2</sup>	3
EXSC 402	Exercise Prescription <sup>1,2</sup>	3
EXSC 403	Advanced Exercise Physiology <sup>1,2</sup>	3
EXSC 410	Clinical Exercise Physiology <sup>1,2</sup>	3
EXSC 411	Exercise Science: Special Populations and Conditions <sup>1,2</sup>	3
EXSC 412	Exercise Science: Senior Synthesis <sup>1,2</sup>	3
EXSC 424	Nutrition and Exercise <sup>1,2</sup>	3
EXSC 450	Exercise Science Internship <sup>1,2</sup>	6
EXSC 450	Exercise Science Internship	6
Subtotal		36
<b>Total Hours</b>		<b>57</b>

<sup>1</sup> Course counts toward Major GPA

<sup>2</sup> Course counts for 50% of Major requirements

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## NATURAL SCIENCE AND MATH COLLEGE-WIDE REQUIREMENTS

Code	Title	Hours
Must earn a "C" or better in the following courses		
BIOL 209		4
BIOL 309		4
PHYS 201	Elements of Physics I with Lab <sup>1</sup>	4
STAT 152	Elementary Statistics I <sup>1</sup>	3
<b>Total Hours</b>		<b>15</b>

<sup>1</sup> Course counts toward Major GPA



## ADDITIONAL PHYSICAL THERAPY PREREQUISITE COURSES

Code	Title	Hours
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
PHYS 202	Elements of Physics II/ Lab	4
PSYC 105	Introduction to Psychology	3
PSYC	See My Rock Audit for options	3

## Doctor of Physical Therapy (DPT) Prerequisite Admission Requirements

### For Application Requirements

Please refer to Slippery Rock University's Physical Therapy (Doctor of Physical Therapy) website for requirements: [www.sru.edu/PT/](http://www.sru.edu/PT/) (<http://www.sru.edu/PT/>)

### Rock Studies 2

Code	Title	Hours
<b>Prerequisite Courses - SRU Physical Therapy</b>		
Select one of the following:		6-8
BIOL 209 & BIOL 309	and	
BIOL 340 & BIOL 410	Vertebrate Anatomy with Lab and Animal Physiology with Lab	
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
Select one of the following:		8
PHYS 201 & PHYS 202	Elements of Physics I with Lab and Elements of Physics II/ Lab	
PHYS 211 & PHYS 213	General Physics I with Lab and General Physics III/ Lab	
STAT 152 or BIOL 325	Elementary Statistics I Biometry with Lab	3
PSYC 105	Introduction to Psychology	3
Additional Psychology Course <sup>1</sup>		3
<b>Total Hours</b>		<b>31-33</b>

<sup>1</sup> See My Rock Audit for specific courses.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Exercise Science - BS (6149)

PRE-PT (SRU Traditional)

Effective Summer 2022

Revised 06.10.2022

UCC 03.01.2022

## RECOMMENDED FOUR-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
Select one of the following:		3
EXSC 100	Introduction to Exercise Science: Careers and Content <sup>3</sup>	
EXSC 101	Applied Anatomy/Lab <sup>3</sup>	
PHYS 201	Elements of Physics I with Lab <sup>1,3</sup>	4
PSYC 105	Introduction to Psychology <sup>1</sup>	3
SUBJ 139	Foundations of Academic Discovery <sup>2</sup>	3
Rock Studies 2 Requirement (p. 29)		3
ESAP 101	FYRST Seminar <sup>*</sup>	1
<b>Hours</b>		<b>17</b>

<b>Spring</b>		
Select one of the following:		3
EXSC 100	Introduction to Exercise Science: Careers and Content <sup>3</sup>	
EXSC 101	Applied Anatomy/Lab <sup>3</sup>	
PHYS 202	Elements of Physics II/ Lab <sup>3</sup>	4
STAT 152	Elementary Statistics I <sup>1,3</sup>	3
Rock Studies 2 Requirement (p. 29)		6
Computer Competency Course (only if needed)		0-1
<b>Hours</b>		<b>16-17</b>

### Second Year

<b>Fall</b>		
Select one of the following:		3
EXSC 201	Exercise Physiology with Lab <sup>3</sup>	
EXSC 202	Biomechanics with Lab <sup>3</sup>	
BIOL 209	Human Anatomy & Physiology I <sup>1,3</sup>	4
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
Rock Studies 2 Requirement (p. 29)		6
<b>Hours</b>		<b>17</b>

<b>Spring</b>		
Select one of the following:		3
EXSC 201	Exercise Physiology with Lab <sup>3</sup>	
EXSC 202	Biomechanics with Lab <sup>3</sup>	
BIOL 217	Anatomy and Physiology II with Lab <sup>3</sup>	3
BIOL 309	Human Anatomy & Physiology II <sup>3</sup>	4
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
Rock Studies 2 Requirement OR Elective (p. 29)		6
<b>Hours</b>		<b>20</b>

### Third Year

<b>Fall</b>		
EXSC 300	Research Methods in Exercise Science <sup>3</sup>	3
EXSC 301	Aerobic Exercise Leadership <sup>3</sup>	3

EXSC 302	Exercise Leadership: Resistance Training <sup>3</sup>	3
Psychology Course (See My Rock Audit for options)		3
Rock Studies 2 Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EXSC 400	Wellness coaching and Program Management <sup>3</sup>	3
EXSC 401	Fitness Assessment <sup>3</sup>	3
EXSC 402	Exercise Prescription <sup>3</sup>	3
EXSC 403	Advanced Exercise Physiology <sup>3</sup>	3
Rock Studies 2 Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
EXSC 410	Clinical Exercise Physiology <sup>3</sup>	3
EXSC 411	Exercise Science: Special Populations and Conditions <sup>3</sup>	3
EXSC 412	Exercise Science: Senior Synthesis <sup>3</sup>	3
Select one of the following:		3
EXSC 424	Nutrition and Exercise <sup>3</sup>	
HLTH 424	Nutrition and Exercise <sup>3</sup>	
Rock Studies/Electives		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EXSC 450	Exercise Science Internship <sup>3,4,5</sup>	12
<b>Hours</b>		<b>12</b>
<b>Total Hours**</b>		<b>127-128</b>

<sup>1</sup> Course satisfies majors and Rock Studies 2 requirements.

<sup>2</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>3</sup> Must earn a grade of "C" or better

<sup>4</sup> EXSC 450: Exercise Science Internship may be scheduled Only after all prerequisites are met. Also required are a valid First Aid, CPR/AED certification and proof of student professional liability insurance. EXSC 412 provides all necessary information pertaining to the internship registration process and is taken the semester prior to internship.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6149

Pre-Physical Therapy SRU Traditional (PT)

Revised: 02.10.2023

## Exercise Science, Bachelor of Science (BS) / Pre-Physician Assistant (SRU) (3+2)

### EXERCISE SCIENCE PROGRAM LEARNING OUTCOMES

- **Professional Competence:** To utilize knowledge, skills, and abilities to evaluate health behavior and risk factors; develop, implement, and evaluate evidence-based exercise and wellness programs, and employ behavioral strategies to motivate individuals to adopt and maintain positive lifestyle behaviors. UO 3,4,5
- **Professional Interaction and Communication:** To interact and communicate effectively by presenting information in oral and written formats, collaborating with professionals and peers, expressing ideas clearly, and giving and receiving feedback. UO 1
- **Professional Behavior and Involvement:** To model professional behaviors (including preparedness, engagement, and appearance), and demonstrate professional involvement across the major. UO 5,7,9
- **Ethical Reasoning:** To make well-informed and unbiased decisions to enhance the well-being of others. UO 8,10
- **Critical Thinking:** To demonstrate clear and accurate reasoning to make decisions and solve problems. UO 2

### What are your options?

**Pre-Physician Assistant SRU 3+2:** Earn a Master of Science degree in Physician Assistant Studies in five years rather than six. In the first three years, you complete your major courses and pre-requisites for the SRU PA program. At the end of your second year, you apply for admission into the SRU PA program. If accepted, your first year in the SRU PA program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Physician Assistant (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU PA program and apply to the SRU PA program in your senior year.

### Academic Policies for Students in the Exercise Science Major

**Effective for all Exercise Science Majors beginning Spring 2021**

1. Policy for earning acceptable grades in the Exercise Science program:
  - a. A student must earn a grade of "C" or better in ALL Required Basic Courses (EXSC 100's, EXSC 200's, EXSC 300's) and Required Upper Level Courses (EXSC 400's, EXSC 410's, EXSC 424, EXSC 450).
  - b. A student must earn a grade of "C" or better in ALL Natural Science and Math College-Wide Requirements (BIOL 209, BIOL 309, BIOL 216, BIOL 217, STAT 152, PHYS 201).
  - c. The Exercise Science curriculum is structured with pre-requisites. A student must earn a "C" or better in the pre-requisite course to be able to take the next course. See course catalog for pre-requisites.
  - d. If a student does not earn a "C" or better, they will be required to:

- i. Retake the course
- ii. They will be dropped from any course(s) in the following semester that requires a "C" or better as a pre-requisite (see course catalog for pre-requisites)
- iii. Students will need to meet with their Academic Advisor and change their schedule accordingly

2. SRU has a *Repeat of Courses Policy* as follows and it can be found in the course catalog: Repeat of Courses < Slippery Rock University (sru.edu) (<https://catalog.sru.edu/archive/2022-2023/academic-policies/repeat-of-courses/>)
  - a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade.

Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis.

Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades.

In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for post-baccalaureate students is the same as the undergraduate student policy.

3. Once the student has exceeded the *SRU Repeat of Courses Policy*, the student will have their major changed to Exploratory and EXSC - Exercise Science Major courses will be removed from their schedule.
4. Policy for changing to the Exercise Science major:
  - a. A Slippery Rock University student wishing to change their major to Exercise Science MUST have an overall GPA of 2.00.
  - b. A transfer student who enters from another University must have an overall GPA of 2.00.
5. Additional costs associated with the Exercise Science major:
  - a. Lab fees will be collected for exercise science classes with a lab component. This fee enhances the department's ability to offer a high-quality program.
  - b. A student in the Exercise Science major is required to maintain current CPR/AED, First Aid, and Student Professional Liability Insurance while enrolled in EXSC 412 and EXSC 450 at their own cost. More information will be provided to students in the upper level EXSC courses.
  - c. EXSC 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific

certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

**Updated September 14, 2021**

## RELATED LINKS

Exercise Science - Pre-Physician Assistant, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/exercise-science-pre-physician-assistant/>)

Exercise Science Program Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/exercise-science/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT – EXERCISE SCIENCE

#### 1<sup>st</sup> Major: Exercise Science

- Overall GPA: 2.00 or higher
- Major GPA (includes Major Requirements and College Wide Requirements): 2.00 or higher

#### 2<sup>nd</sup> Major: Pre-PA SRU 3+2 Exercise Science

- Overall GPA: 3.25 or higher

### SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	44
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	45
	Natural Science and Math College-Wide Requirements	15
	Additional Physician Assistant Prerequisite Courses	28
	Electives	0

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the 1<sup>st</sup> year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.

### ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	

Subtotal	15
<b>Integrated Inquiry</b>	
<i>Creative and Aesthetic Inquiry</i>	
Select 3 Credits (p. 29)	3
<i>Humanities Inquiry</i>	
Select 3 Credits (p. 29)	3
<i>Social Science Inquiry</i>	
Select 3 Credits (p. 29)	3
<i>Natural Sciences Inquiry</i>	
BIOL 209	4
<i>Physical Science Inquiry</i>	
PHYS 201 Elements of Physics I with Lab	4
Subtotal	17
<b>Thematic Thread</b>	
Select 12 Credits (p. 29) <sup>2,3</sup>	12
<b>Total Hours</b>	<b>44</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

<sup>3</sup> Additional Physician Assistant prerequisite courses may be fulfilled in a Thematic Thread.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this

requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## MAJOR REQUIREMENTS

- If you choose to pursue Pre-Physician Assistant SRU 3+2 Exercise Science and are not accepted into the PA program, then EXSC 450: Internship is required to complete a first major of Exercise Science. Please refer to the Exercise Science Curriculum Guide.

Code	Title	Hours
<b>Required Basic Courses</b>		
Must earn a "C" or better in the following courses		
EXSC 100	Introduction to Exercise Science: Careers and Content <sup>1,2</sup>	3
EXSC 101	Applied Anatomy/Lab <sup>1,2</sup>	3
EXSC 201	Exercise Physiology with Lab <sup>1,2</sup>	3
EXSC 202	Biomechanics with Lab <sup>1,2</sup>	3
EXSC 300	Research Methods in Exercise Science <sup>1,2</sup>	3
EXSC 301	Aerobic Exercise Leadership <sup>1,2</sup>	3
EXSC 302	Exercise Leadership: Resistance Training <sup>1,2</sup>	3
Subtotal		21
<b>Required Upper Level Courses (24 credits if accepted to SRU PA Program)</b>		
Must earn a "C" or better in the following courses		
EXSC 400	Wellness coaching and Program Management <sup>1,2</sup>	3
EXSC 401	Fitness Assessment <sup>1,2</sup>	3
EXSC 402	Exercise Prescription <sup>1,2</sup>	3
EXSC 403	Advanced Exercise Physiology <sup>1,2</sup>	3
EXSC 410	Clinical Exercise Physiology <sup>1,2</sup>	3
EXSC 411	Exercise Science: Special Populations and Conditions <sup>1,2</sup>	3
EXSC 412	Exercise Science: Senior Synthesis <sup>1,2</sup>	3
EXSC 424	Nutrition and Exercise <sup>1,2</sup>	3
Subtotal		24
<b>Total Hours</b>		<b>45</b>

<sup>1</sup> Course counts toward Major GPA

<sup>2</sup> Course counts for 50% of Major requirements

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## NATURAL SCIENCE AND MATH COLLEGE WIDE REQUIREMENTS

Code	Title	Hours
Must earn a "C" or better in the following courses		
BIOL 209		4
BIOL 309		4
PHYS 201	Elements of Physics I with Lab <sup>1</sup>	4
STAT 152	Elementary Statistics I <sup>1</sup>	3
<b>Total Hours</b>		<b>15</b>

<sup>1</sup> Course counts toward Major GPA

## ADDITIONAL PHYSICIAN ASSISTANT PREREQUISITE COURSES

Code	Title	Hours
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 250	Genetics with Lab	4
BIOL 210	Medical Microbiology with Lab	3
or BIOL 330	Microbiology/Lab	
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
CHEM 201	Organic Chemistry I	3
EXSC 250	Medical Terminology	3
or HCAM 250	Medical Terminology for Healthcare Administrators	
PSYC 105	Introduction to Psychology	3
<b>Total Hours</b>		<b>28</b>

## Physician Assistant Studies (Master of Science in Physician Assistant Studies)

### Prerequisite Admission Requirements – Pre- Physician Assistant 3+2

#### For Application Requirements

Please refer to Slippery Rock University's Physician Assistant Studies (Master of Science in Physician Assistant Studies) website for requirements: <http://www.sru.edu/pa> (<http://www.sru.edu/pa/>)

#### Rock Studies 2

Code	Title	Hours
<b>Prerequisite Courses - SRU Physician Assistant</b>		
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 210	Medical Microbiology with Lab	3
or BIOL 330	Microbiology/Lab	
BIOL 209		4
BIOL 309		4
BIOL 250	Genetics with Lab	4
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
CHEM 201	Organic Chemistry I	3
EXSC 250	Medical Terminology	3
or HCAM 250	Medical Terminology for Healthcare Administrators	
PSYC 105	Introduction to Psychology	3
Inferential Statistics Course <sup>1</sup>		3
<b>Total Hours</b>		<b>39</b>

<sup>1</sup> Any statistics course with inferential statistics embedded. See My Rock Audit for specific courses.

## Pre-Physician Assistant SRU 3+2 Requirements

If any of these requirements are not met, the 3+2 designation will be removed from the student's record:

1. A 3.25 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Physician Assistant SRU 3+2 program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

### Provision

Should a Pre-Physician Assistant SRU 3+2 student be unsuccessful in completing the 1<sup>st</sup> two semesters (summer or fall) of the Physician Assistant Program and wants to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, Physician Assistant courses will count toward the completion of his/her undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the Physician Assistant Studies Program with an earned Bachelor's degree.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

EXERCISE SCIENCE - BS (6149)

PRE-PA SRU 3+2 (6SPE)

This program is effective as of Summer 2022

Revised 06.10.2022

UCC 03.01.2022

## RECOMMENDED THREE-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EXSC 100	Introduction to Exercise Science: Careers and Content <sup>3</sup>	3
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
PHYS 201	Elements of Physics I with Lab <sup>1,3</sup>	4
SUBJ 139	Foundations of Academic Discovery <sup>2</sup>	3
Rock Studies 2 Requirement (p. 29)		3
ESAP 101	FYRST Seminar *	1
<b>Hours</b>		<b>18</b>
<b>Spring</b>		
EXSC 101	Applied Anatomy/Lab <sup>3</sup>	3
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
STAT 152	Elementary Statistics I <sup>1,3</sup>	3
PSYC 105	Introduction to Psychology <sup>1</sup>	3
Rock Studies 2 Requirement (p. 29)		3



Computer Competency Course (only if needed) 0-1

**Hours 16-17****Second Year****Fall**EXSC 201 Exercise Physiology with Lab <sup>3</sup> 3EXSC 202 Biomechanics with Lab <sup>3</sup> 3BIOL 216 Anatomy and Physiology I with Lab <sup>1,3</sup> 3BIOL 209 Human Anatomy & Physiology I <sup>1,3</sup> 4

BIOL 114 Biology II: Foundations of Molecules, Genes and Cells with Lab 4

CHEM 201 Organic Chemistry I 3

Rock Studies 2 Requirement (p. 29) 3

\*Additional credits beyond 18 requires an extra fee.

**Hours 23****Spring**EXSC 300 Research Methods in Exercise Science <sup>3</sup> 3EXSC 301 Aerobic Exercise Leadership <sup>3</sup> 3EXSC 302 Exercise Leadership: Resistance Training <sup>3</sup> 3BIOL 309 Human Anatomy & Physiology II <sup>3</sup> 4

BIOL 250 Genetics with Lab 4

Rock Studies 2 Requirement (p. 29) 3

\*Additional credits beyond 18 requires an extra fee

**Hours 20****Third Year****Fall**EXSC 400 Wellness coaching and Program Management <sup>3</sup> 3EXSC 401 Fitness Assessment <sup>3</sup> 3EXSC 402 Exercise Prescription <sup>3</sup> 3EXSC 403 Advanced Exercise Physiology <sup>3</sup> 3

Rock Studies 2 Requirement (p. 29) 6

**Hours 18****Winter**Rock Studies 2 Requirement (Summer/Winter Courses) (p. 29) <sup>4</sup> 9**Hours 9****Spring**EXSC 410 Clinical Exercise Physiology <sup>3</sup> 3EXSC 411 Exercise Science: Special Populations and Conditions <sup>3</sup> 3EXSC 412 Exercise Science: Senior Synthesis <sup>3</sup> 3

Select one of the following: 3

EXSC 424 Nutrition and Exercise <sup>3</sup> 3HLTH 424 Nutrition and Exercise <sup>3</sup> 3

BIOL 330 Microbiology/Lab 3

EXSC 250 Medical Terminology <sup>1</sup> 3  
or HCAM 250 or Medical Terminology for Healthcare Administrators**Hours 18****Fourth Year****Fall****Senior Year: If not accepted into SRU PA <sup>5</sup>**EXSC 450 Exercise Science Internship <sup>3,6</sup> 12**Hours 12****Total Hours\*\* 134-135**<sup>1</sup> Course satisfies majors and Rock Studies 2 requirements.<sup>2</sup> Course offered in multiple subjects; cannot take course in first major subject<sup>3</sup> Must earn a "C" or better in the course.<sup>4</sup> May also be taken in the summer.<sup>5</sup> **Senior Year- If not accepted into SRU PA:** If you choose to pursue Exercise Science 3+2 and are not accepted into SRU PA Graduate Program, then EXSC 450: Exercise Science Internship (12 credits) is required to complete a first major of Exercise Science. Please refer to the Exercise Science Curriculum Guide.<sup>6</sup> Students must complete this 12 credit requirement by registering for two sections of this 6-cr hour course in the same semester

\* Students are encouraged to take ESAP 101 as a Free Elective.

Students must meet all Exercise Science 3+2 major requirements, SRU PA Program prerequisites, and Rock Studies 2 requirements to apply.

**Senior Year- If accepted into the SRU PA:** The first year will count as the 4th year of the Exercise Science program. Upon successful completion of the first year of the SRU PA Graduate Program, students will graduate with a BS in Exercise Science. Should an Exercise Science 3+2 student be unsuccessful in completing the 1<sup>st</sup> year of the SRU PA Graduate Program and wants to complete their original undergraduate degree, it is solely up to the discretion of their undergraduate program Department Chair to determine which, if any Physician Assistant courses will count toward the completion of their undergraduate degree. In addition, students must complete EXSC 450: Exercise Science Internship (12 credits).**Senior Year- If not accepted into SRU PA:** If you choose to pursue Exercise Science 3+2 and are not accepted into SRU PA Graduate Program, then EXSC 450: Exercise Science Internship (12 credits) is required to complete a first major of Exercise Science. Please refer to the Exercise Science Curriculum Guide.*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

Major Code: 6149

Pre-Physician Assistant SRU 3+2 (6SPE)

Revised: 02.10.2023

## Exercise Science, Bachelor of Science (BS) / Pre-Physician Assistant (SRU) (Traditional)

### EXERCISE SCIENCE PROGRAM LEARNING OUTCOMES

- **Professional Competence:** To utilize knowledge, skills, and abilities to evaluate health behavior and risk factors; develop, implement, and evaluate evidence-based exercise and wellness programs, and

employ behavioral strategies to motivate individuals to adopt and maintain positive lifestyle behaviors. UO 3,4,5

- **Professional Interaction and Communication:** To interact and communicate effectively by presenting information in oral and written formats, collaborating with professionals and peers, expressing ideas clearly, and giving and receiving feedback. UO 1
- **Professional Behavior and Involvement:** To model professional behaviors (including preparedness, engagement, and appearance), and demonstrate professional involvement across the major. UO 5,7,9
- **Ethical Reasoning:** To make well-informed and unbiased decisions to enhance the well-being of others. UO 8, 10
- **Critical Thinking:** To demonstrate clear and accurate reasoning to make decisions and solve problems. UO 2

## What are your options?

**Pre-Physician Assistant SRU 3+2:** Earn a Master of Science degree in Physician Assistant Studies in five years rather than six. In the first three years, you complete your major courses and pre-requisites for the SRU PA program. At the end of your second year, you apply for admission into the SRU PA program. If accepted, your first year in the SRU PA program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Physician Assistant (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU PA program and apply to the SRU PA program in your senior year.

## Academic Policies for Students in the Exercise Science Major

*Effective for all Exercise Science Majors beginning Spring 2021*

1. Policy for earning acceptable grades in the Exercise Science program:
  - a. A student must earn a grade of "C" or better in ALL Required Basic Courses (EXSC 100's, EXSC 200's, EXSC 300's) and Required Upper Level Courses (EXSC 400's, EXSC 410's, EXSC 424, EXSC 450).
  - b. A student must earn a grade of "C" or better in ALL Natural Science and Math College-Wide Requirements (BIOL 209, BIOL 309, BIOL 216, BIOL 217, STAT 152, PHYS 201).
  - c. The Exercise Science curriculum is structured with pre-requisites. A student must earn a "C" or better in the pre-requisite course to be able to take the next course. See course catalog for pre-requisites.
  - d. If a student does not earn a "C" or better, they will be required to:
    - i. Retake the course
    - ii. They will be dropped from any course(s) in the following semester that requires a "C" or better as a pre-requisite (see course catalog for pre-requisites)
    - iii. Students will need to meet with their Academic Advisor and change their schedule accordingly
2. SRU has a *Repeat of Courses Policy* as follows and it can be found in the course catalog: Repeat of Courses < Slippery Rock University (sru.edu) (<https://catalog.sru.edu/archive/2022-2023/academic-policies/repeat-of-courses/>)
  - a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade.

Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis.

Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades.

In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for post-baccalaureate students is the same as the undergraduate student policy.
3. Once the student has exceeded the *SRU Repeat of Courses Policy*, the student will have their major changed to Exploratory and EXSC - Exercise Science Major courses will be removed from their schedule.
4. Policy for changing to the Exercise Science major:
  - a. A Slippery Rock University student wishing to change their major to Exercise Science MUST have an overall GPA of 2.00.
  - b. A transfer student who enters from another University must have an overall GPA of 2.00.
5. Additional costs associated with the Exercise Science major:
  - a. Lab fees will be collected for exercise science classes with a lab component. This fee enhances the department's ability to offer a high-quality program.
  - b. A student in the Exercise Science major is required to maintain current CPR/AED, First Aid, and Student Professional Liability Insurance while enrolled in EXSC 412 and EXSC 450 at their own cost. More information will be provided to students in the upper level EXSC courses.
  - c. EXSC 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

*Updated September 14, 2021*

## RELATED LINKS

Exercise Science - Pre-Physician Assistant, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/exercise-science-pre-physician-assistant/>)

Exercise Science Program Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/exercise-science/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT - EXERCISE SCIENCE

Overall GPA: 2.00 or higher

Major GPA (includes Major Requirements and College-Wide Requirements): 2.00 or higher

### SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	44
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	57
	Natural Science and Math College-Wide Requirements	15
	Additional Physician Assistant Prerequisite Courses	28
	Electives	0

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

#### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
BIOL 209		4
<i>Physical Science Inquiry</i>		
PHYS 201	Elements of Physics I with Lab	4
Subtotal		17

### Thematic Thread

Select 12 Credits (p. 29) <sup>2,3</sup>	12
<b>Total Hours</b>	<b>44</b>

- Course offered in multiple subjects; cannot take course in first major subject
- One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.
- Additional Physician Assistant prerequisite courses may be fulfilled in a Thematic Thread.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

### MAJOR REQUIREMENTS

- 29 major credits must be taken at SRU or PASSHE
- 29 major credits must be taken at the 300 level or above
- Students may choose to earn a BS in Exercise Science as preparation for graduate studies in many health care related fields. In this case, the student should learn what prerequisites are required for his/her intended graduate program and take those courses as electives while completing the Exercise Science Program.

Code	Title	Hours
<b>Required Basic Courses</b>		
Must earn a "C" or better in the following courses		

EXSC 100	Introduction to Exercise Science: Careers and Content <sup>1,2</sup>	3
EXSC 101	Applied Anatomy/Lab <sup>1,2</sup>	3
EXSC 201	Exercise Physiology with Lab <sup>1,2</sup>	3
EXSC 202	Biomechanics with Lab <sup>1,2</sup>	3
EXSC 300	Research Methods in Exercise Science <sup>1,2</sup>	3
EXSC 301	Aerobic Exercise Leadership <sup>1,2</sup>	3
EXSC 302	Exercise Leadership: Resistance Training <sup>1,2</sup>	3

Subtotal 21

#### Required Upper Level Courses

Must earn a "C" or better in the following courses

EXSC 400	Wellness coaching and Program Management <sup>1,2</sup>	3
EXSC 401	Fitness Assessment <sup>1,2</sup>	3
EXSC 402	Exercise Prescription <sup>1,2</sup>	3
EXSC 403	Advanced Exercise Physiology <sup>1,2</sup>	3
EXSC 410	Clinical Exercise Physiology <sup>1,2</sup>	3
EXSC 411	Exercise Science: Special Populations and Conditions <sup>1,2</sup>	3
EXSC 412	Exercise Science: Senior Synthesis <sup>1,2</sup>	3
EXSC 424	Nutrition and Exercise <sup>1,2</sup>	3
EXSC 450	Exercise Science Internship <sup>1,2</sup>	6
EXSC 450	Exercise Science Internship <sup>1,2</sup>	6

Subtotal 36

**Total Hours 57**

<sup>1</sup> Course counts toward Major GPA

<sup>2</sup> Course counts for 50% of Major requirements

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## NATURAL SCIENCE AND MATH COLLEGE-WIDE REQUIREMENTS

Code	Title	Hours
Must earn a "C" or better in the following courses		
BIOL 209		4
BIOL 309		4
PHYS 201	Elements of Physics I with Lab <sup>1</sup>	4
STAT 152	Elementary Statistics I <sup>1</sup>	3
<b>Total Hours</b>		<b>15</b>

<sup>1</sup> Course counts toward Major GPA

## ADDITIONAL PHYSICIAN ASSISTANT PREREQUISITE COURSES

Code	Title	Hours
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 250	Genetics with Lab	4
BIOL 210	Medical Microbiology with Lab	3
or BIOL 330	Microbiology/Lab	
CHEM 107	General Chemistry I	3

CHEM 111	General Chemistry I Lab	1
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
CHEM 201	Organic Chemistry I	3
EXSC 250	Medical Terminology	3
or HCAM 250	Medical Terminology for Healthcare Administrators	
PSYC 105	Introduction to Psychology	3

## Physician Assistant Studies (Master of Science in Physician Assistant Studies)

### Prerequisite Admission Requirements

#### For Application Requirements

Please refer to Slippery Rock University's Physician Assistant Studies (Master of Science in Physician Assistant Studies) website for requirements: <http://www.sru.edu/pa> (<http://www.sru.edu/pa/>).

### Rock Studies 2

Code	Title	Hours
<b>Prerequisite Courses - SRU Physician Assistant</b>		
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 209		4
BIOL 309		4
BIOL 250	Genetics with Lab	4
BIOL 210	Medical Microbiology with Lab	3
or BIOL 330	Microbiology/Lab	
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
CHEM 201	Organic Chemistry I	3
EXSC 250	Medical Terminology	3
or HCAM 250	Medical Terminology for Healthcare Administrators	
PSYC 105	Introduction to Psychology	3
Inferential Statistics Course <sup>1</sup>		3
<b>Total Hours</b>		<b>39</b>

<sup>1</sup> Any statistics course with inferential statistics embedded. See My Rock Audit for specific courses.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Exercise Science - BS (6149)

PRE-PA (SRU Traditional)

Effective Summer 2022

Revised 06.10.2022  
UCC 03.01.2022

## RECOMMENDED FOUR-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
Select one of the following:		3
EXSC 100	Introduction to Exercise Science: Careers and Content <sup>3</sup>	
EXSC 101	Applied Anatomy/Lab <sup>3</sup>	
PHYS 201	Elements of Physics I with Lab <sup>1,3</sup>	4
PSYC 105	Introduction to Psychology <sup>1</sup>	3
SUBJ 139	Foundations of Academic Discovery <sup>2</sup>	3
Rock Studies 2 Requirement (p. 29)		3
ESAP 101	FYRST Seminar *	1
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
Select one of the following:		3
EXSC 100	Introduction to Exercise Science: Careers and Content <sup>3</sup>	
EXSC 101	Applied Anatomy/Lab <sup>3</sup>	
STAT 152	Elementary Statistics I <sup>1,3</sup>	3
Rock Studies 2 Requirement (p. 29)		6
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab (or Rock Studies 2)	4
Computer Competency Course (only if needed)		0-1
<b>Hours</b>		<b>16-17</b>
<b>Second Year</b>		
<b>Fall</b>		
Select one of the following:		3
EXSC 201	Exercise Physiology with Lab <sup>3</sup>	
EXSC 202	Biomechanics with Lab <sup>3</sup>	
BIOL 209	Human Anatomy & Physiology I <sup>1,3</sup>	4
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
Rock Studies 2 Requirement (p. 29)		3
<b>Hours</b>		<b>18</b>
<b>Spring</b>		
Select one of the following:		
EXSC 201	Exercise Physiology with Lab <sup>3</sup>	
EXSC 202	Biomechanics with Lab <sup>3</sup>	
BIOL 309	Human Anatomy & Physiology II <sup>3</sup>	4
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
EXSC 250	Medical Terminology	3
Rock Studies 2 Requirement (p. 29)		3
<b>Hours</b>		<b>14</b>

### Third Year

#### Fall

EXSC 300	Research Methods in Exercise Science <sup>3</sup>	3
EXSC 301	Aerobic Exercise Leadership <sup>3</sup>	3
EXSC 302	Exercise Leadership: Resistance Training <sup>3</sup>	3
BIOL 250	Genetics with Lab	4
CHEM 201	Organic Chemistry I	3
<b>Hours</b>		<b>16</b>

#### Spring

EXSC 400	Wellness coaching and Program Management <sup>3</sup>	3
EXSC 401	Fitness Assessment <sup>3</sup>	3
EXSC 402	Exercise Prescription <sup>3</sup>	3
EXSC 403	Advanced Exercise Physiology <sup>3</sup>	3
Rock Studies 2 Requirement (p. 29)		3
BIOL 330 or BIOL 210	Microbiology/Lab <sup>4</sup> or Medical Microbiology with Lab	3
<b>Hours</b>		<b>18</b>

### Fourth Year

#### Fall

EXSC 410	Clinical Exercise Physiology <sup>3</sup>	3
EXSC 411	Exercise Science: Special Populations and Conditions <sup>3</sup>	3
EXSC 412	Exercise Science: Senior Synthesis <sup>3</sup>	3
Select one of the following:		
EXSC 424	Nutrition and Exercise <sup>3</sup>	
HLTH 424	Nutrition and Exercise <sup>3</sup>	
Rock Studies 2 Requirement (p. 29)		6
<b>Hours</b>		<b>15</b>

#### Spring

EXSC 450	Exercise Science Internship <sup>3,5,6</sup>	12
<b>Hours</b>		<b>12</b>
<b>Total Hours**</b>		<b>126-127</b>

### SRU Physician Assistant Program begins in the Summer.

- Course satisfies majors and Rock Studies 2 requirements.
- Course offered in multiple subjects; cannot take course in first major subject
- Must earn a grade of "C" or better
- If BIOL 330 or BIOL 210 is not taken, replace with Rock Studies 2 and take BIOL 210 in Fall Fourth Year.
- EXSC 450: Exercise Science Internship may be scheduled Only after all prerequisites are met. Also required are a valid First Aid, CPR/AED certification and proof of student professional liability insurance. EXSC 412 provides all necessary information pertaining to the internship registration process and is taken the semester prior to internship.
- Students are encouraged to take ESAP 101 as a Free Elective.
- Students must complete this 12 credit requirement by registering for two sections of this 6-cr hour course in the same semester

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please



consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6149

Pre-Physician Assistant SRU Traditional (PA)

Revised: 02.10.2023

## Healthcare Administration and Management

Chair	Secretary	Location	Department Phone
Dr. David Jordan	Tanya Turner	109 Patterson	724-738-2280

Department Web Site URL (<https://www.sru.edu/academics/majors-and-minors/health-care-administration-and-management/>)

Department Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/FS-HCAM.pdf>)

## Faculty

### Amy Cashdollar

Instructor

Health Care Admin & Management

### John Cotter

Instructor

Health Care Admin & Management

Ph.D., Virginia Commonwealth University

M.A., SUNY of Buffalo

B.A., Canisius College

### Natalie Dick

Assistant Professor

Health Care Admin & Management

M.H.A., University of Pittsburgh

B.A., Penn State University

### David Jordan

Professor

Health Care Admin & Management

Ph.D., Virginia Commonwealth University

M.B.A., University of Pittsburgh

B.S., University of Pittsburgh

### Alyshia Ravida

Instructor

Health Care Admin & Management

M.H.A., University of Pittsburgh

B.S., Slippery Rock University

## Programs

### Majors

- HCAM, Bachelor of Science (BS) - Concentration in Financial Management (p. 605)
- HCAM, Bachelor of Science (BS) - Concentration in Information Systems (p. 609)
- HCAM, Bachelor of Science (BS) - Concentration in Leadership (p. 612)

- HCAM, Bachelor of Science (BS) - Concentration in Leadership - Online (p. 616)
- HCAM, Bachelor of Science (BS) - Concentration in Leadership / Pre-Occupational Therapy (SRU) (3+3) (p. 618)
- HCAM, Bachelor of Science (BS) - Concentration in Leadership / Pre-Occupational Therapy (SRU) (Traditional) (p. 622)
- HCAM, Bachelor of Science (BS) - Concentration in Leadership / Pre-Physical Therapy (SRU) (3+3) (p. 625)
- HCAM, Bachelor of Science (BS) - Concentration in Leadership / Pre-Physical Therapy (SRU) (Traditional) (p. 630)
- HCAM, Bachelor of Science (BS) - Concentration in Leadership / Pre-Physician Assistant (SRU) (3+2) (p. 633)
- HCAM, Bachelor of Science (BS) - Concentration in Leadership / Pre-Physician Assistant (SRU) (Traditional) (p. 637)
- HCAM, Bachelor of Science (BS) - Concentration in Legal Environment (p. 640)
- HCAM, Bachelor of Science (BS) - Concentration in Long-Term Care (p. 643)
- HCAM, Bachelor of Science (BS) - Concentration in Marketing and Sales (p. 647)
- HCAM, Bachelor of Science (BS) - Concentration in Medical Device Sales (p. 650)
- HCAM, Bachelor of Science (BS) - Concentration in Quality and Risk Management (p. 653)

## Minors

- HCAM, Minor (p. 656)

## Courses

### HCAM Courses

#### HCAM 139 - Foundations of Academic Discovery

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

#### HCAM 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HCAM 195 - Health Care Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format and on a timely topic.

Prerequisite: HCAM 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**HCAM 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisite: HCAM 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HCAM 200 - Introduction to Population Health**

Introduction to Population Health examines the social determinants of health, diverse population groups' interface with a continuum of healthcare services, and fundamental issues of health equity. This course will focus on how population health is a function of multiple interconnected healthcare system participants.

Credits: 3

**HCAM 230 - US Healthcare Systems**

This course offers an overview of the U.S. healthcare delivery system and challenges that confront the industry. It examines legal, technological, economic, political, ethical, and social forces that impact the healthcare industry. Students will learn about the delivery of healthcare services in various settings, as well as the role of government, professional agencies, and other industry related organizations. The allocation of scarce healthcare resources is examined through the lenses of social awareness, civic responsibility, and quasi-market forces. This course also equips students to become informed healthcare consumers and introduces them to healthcare employment opportunities.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms, Offered Summer Terms

Thematic Thread(s): Citizenship & Social Problems, Institutions & Human Innovations, Transfer Thread Completion Course

**HCAM 250 - Medical Terminology for Healthcare Administrators**

This course is designed to provide students with a basic understanding of medical language. Emphasis is placed on basic medical word construction and language derivation related to health care.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Thematic Thread(s): Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**HCAM 265 - Managed Care & Insurance**

This course examines Managed Care Organizations, insurance plans, Consumer Directed Health Care plans, and Health Care Exchanges. Students will explore the influence of managed health care and the various forms of health care insurance on the organization and delivery of health services in the United States are explored.

Prerequisite: HCAM 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer, Offered Summer Terms

**HCAM 275 - Health Care Legal & Ethical Foundations**

This course connects theoretical foundations of ethics with practical legal issues facing health care leaders. The course will define the role of the health care provider, payer, consumers, delivery systems, and regulatory bodies in addressing challenges presented by health care law and ethics.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

**HCAM 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HCAM 295 - Health Care Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format and on a timely topic.

Prerequisite: HCAM 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**HCAM 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisite: HCAM 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HCAM 300 - Healthcare Systems: Global Perspectives and Analysis**

This course examines health care systems from other countries in contrast to the United States system of health care. Students will be introduced to larger global perspectives about healthcare systems. Comparisons of healthcare systems' infrastructures, finance systems, level of government involvement, and key metrics of health outcomes will be discussed along with the interconnected socio-political issues across diverse populations.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HCAM 305 - Health Care Quality & Process Improvement**

This course examines a systems approach to continuous improvement processes in healthcare settings. Quality and process concepts and theories examined in this course are guided by data and processes at the unit and organization levels that reach beyond regulatory and accreditation compliance.

Prerequisites: HCAM 230<sup>D</sup> and HCAM 265<sup>\*D</sup> (may be taken concurrently).  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HCAM 332 - US Health Care Policy**

This course provides an overview of US health care policy in the postwar period. The course will examine the problems of health care costs, access, and quality in depth, consider alternative approaches to health care reform and use a comparative method to examine the health policies of other advanced industrialized countries. In addition, the course aims to introduce students to health policy analysis as an applied social science discipline.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HCAM 335 - Current Topics in Health Care**

This course examines current topics in healthcare from the interests of various constituencies and organizations. It is designed to introduce students to the identification and study of current economic, regulatory, operational issues, and emerging trends impacting the healthcare industry. Matters of healthcare policy, healthcare reform, current clinical and non-clinical healthcare developments, policy process, and advocacy will also be examined.

Credits: 3

Term(s) Typically Offered: Offered Summer & Winter Terms

Thematic Thread(s): Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HCAM 360 - Healthcare Organizational Dynamics**

This course introduces concepts associated with organizational dynamics in the healthcare industry. Students will examine content from individual, team, and organizational perspectives. Organizational dynamics are examined to provide a better understanding of how to deliver value within a competitive and changing healthcare industry.

Prerequisite: HCAM 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms, Offered Winter Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HCAM 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HCAM 395 - Health Care Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format and on a timely topic.

Prerequisite: HCAM 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**HCAM 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisite: HCAM 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HCAM 400 - Legal Environment of Healthcare**

Legal Environment of Healthcare acquaints future healthcare managers with legal issues relating to government, patients, healthcare employees, and contractors. This course surveys a wide variety of legal concepts, terms, and common-sense tips for entry-level healthcare organization employees.

Prerequisites: HCAM 230<sup>C</sup> and HCAM 275<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even, Offered Spring Terms, Offered Winter Terms Odd

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**HCAM 410 - Strategic Leadership in Health Care Organizations**

This course will examine leadership principles necessary to be effective in a continuously changing health care industry. Concepts covered include cultural competency, patient and family centered care, community outreach, coalition building, teamwork effectiveness, and leading within an environment of change in the US health care system.

Prerequisites: HCAM 230<sup>D</sup> and (HCAM 360<sup>D</sup> or MGMT 351<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**HCAM 415 - Marketing for Health Care Organizations**

This course covers the application of marketing concepts, tools and techniques to marketing problems, emphasizing strategic thinking, and analysis in a healthcare environment. Students will gain perspective on how a healthcare marketing function links to the overall business system.

Prerequisite: MRKT 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HCAM 425 - Long Term Care Management**

This course will examine long-term care organizations and care in the United States. Students examine external and internal long-term environments, the organization and delivery of services, administration, management, and leadership of long-term care organizations.

Prerequisites: HCAM 230<sup>D</sup> and (HCAM 360<sup>D</sup> or MGMT 351<sup>D</sup>) and HCAM 265<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**HCAM 430 - Finance for Healthcare Organizations**

This course is designed to build on accounting and financial management strategies used in profit and not-for-profit healthcare organizations. It will expose students to the practical application and theoretical constructs necessary to manage finances in a variety of healthcare organizations.

Prerequisites: HCAM 230<sup>D</sup> and ACCT 209<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HCAM 450 - Internship-Health Care Administration & Management**

This internship provides students with an opportunity to apply theory to practice and develop competencies through a work-related experience in a profit, or not-for-profit, healthcare related organization.

Prerequisites: HCAM 230<sup>D</sup> and HCAM 360<sup>D</sup> and HCAM 265<sup>D</sup> and HCAM 400<sup>D</sup> and (HCAM 405 (may be taken concurrently)<sup>D</sup> or HCAM 305<sup>\*D</sup>) (may be taken concurrently).

<sup>D</sup> Requires minimum grade of D.

Credits: 1-12

Term(s) Typically Offered: Offered Summer & Winter Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HCAM 470 - Healthcare Practice Management**

This course will prepare students with the fundamental knowledge needed to manage various types of healthcare practices. This includes topics such as differentiating between types of medical practices; accreditation, credentialing and licensing; regulatory compliance, compensation, productivity and provider contracting; billing & the lifecycle of a claim; patient experience & referral analysis; quality & utilization management; coordination of care; and innovation in care, payment and organizational models.

Prerequisite: HCAM 360<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**HCAM 480 - Healthcare Value-Based Reimbursement Systems**

This course examines payment reform in the healthcare industry, focusing on the shift to value-based reimbursement systems. Students will gain a basic understanding of data sources, the requirements to prepare data for analysis to develop practical applied insights, and the importance of integrating such into healthcare organizational workflows. Students will be able to apply their understanding of the challenges and requirements of performance metrics and systems information in a healthcare environment and learn methods used to improve value in healthcare services through leveraging data and information.

Prerequisites: HCAM 305<sup>D</sup> or HCAM 405<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

**HCAM 490 - Independent Study**

In-depth reading and/or research with the guidance of a faculty member in an area selected by the student. Prerequisites: 12 credits in major courses, application and permission of the instructor, departmental chairperson and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HCAM 495 - Health Care Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format and on a timely basis.

Prerequisite: HCAM 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**HCAM 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisite: HCAM 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HCAM 499 - Health Care Theory and Research Capstone Seminar**

This course examines health care theories that focus on the key concepts of individual and population health, access to health care, cost of health care, quality of health care, and health care organization structures and processes. Students will research areas of interest based on these theoretical concepts.

Prerequisites: HCAM 230<sup>D</sup> and HCAM 360<sup>D</sup> and HCAM 400<sup>\*D</sup> and (HCAM 405 (may be taken concurrently)<sup>D</sup> or HCAM 305<sup>\*D</sup>) (may be taken concurrently).

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may **not** enroll.

## HCAM, Bachelor of Science (BS) - Concentration in Financial Management

**1 Knowledge of the Healthcare Environment:** Students will demonstrate an accurate understanding of:

- Health care system structures.
- Reimbursement/payment models.
- Factors associated with population health.

(UG 02, UG 09)

**2 Business Technology and Analytics:** Students will articulate an applied understanding of key quality improvement metrics and methods to support evidence-based practice guidelines including:

- Demonstrate knowledge, skills and abilities to plan for and ensure the security, integrity, and privacy of data and confidentiality of the end user.
- Demonstrate an ability to identify, aggregate, and summarize technical information for technical and non-technical personnel.

(UG 02, UG 10)

**3 Communication and Relationship Management:** Students will demonstrate the ability to interact and communicate effectively by:

- Presenting information in oral and written formats.
- Collaborating effectively with others.

(UG 01, UG 05, UG 08, UG 09)

**4 Financial Management and Economic Reasoning:** Students will demonstrate:

- An ability to analyze, quantify, evaluate and determine the sound allocation of financial resources.
- An ability to apply economic concepts for efficient allocation of scarce resources.

(UG 02, UG 04)

**5 Healthcare Legal Environment and Ethics:** Students will be able to:

- Recognize will ethical dilemmas in healthcare.
- Recognize key healthcare legal and regulatory environment parameters.
- Demonstrate discern viable options for ethical guided decision-making processes.
- Demonstrate applied legal and regulatory reasoning.

(UG 02, UG 05, UG 07, UG 08, UG 09)

**6 Organizational Dynamics:** Students will articulate an applied understanding of:

- Organizational mission, vision, and culture.
- Behaviors associated with organizational commitment and job performance.

(UG 05, UG 07, UG 08, UG 09)

## Academic Policies for Students in the Health Care Administration and Management (HCAM) Major

*Effective for all Health Care Administration and Management (HCAM) Majors beginning Fall 2021*

1. Policy for earning acceptable grades in the HCAM program:
  - a. A student must earn a grade of "C" or better in ALL Required Basic Courses (HCAM 230, HCAM 265, HCAM 275) and Required Upper-Level Courses (HCAM 305, HCAM 360, HCAM 400, HCAM 430, HCAM 450, HCAM 480, and HCAM 499).
  - b. A student must earn a grade of "C" or better in ALL non-HCAM major Requirements (ACCT 209, ACCT 340, ECON 312, HLTH 210, and MIS 210, STAT 152 or ECON 219/MGMT 219).
  - c. The HCAM curriculum is structured with pre-requisites. A student must earn a "C" or better in the pre-requisite course to be able to take the next course. See course catalog for pre-requisites.
  - d. If a student does not earn a "C" or better, they will be required to:
    - i. Retake the course
    - ii. They will be dropped from any course(s) in the following semester that requires a "C" or better as a pre-requisite (see course catalog for pre-requisites)
    - iii. Students will need to meet with their Academic Advisor and change their schedule accordingly



2. SRU has a *Repeat of Courses Policy* as follows and it can be found in the course catalog: **Repeat of Courses < Slippery Rock University (sru.edu)**
- Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade. Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis. Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades. In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for post-baccalaureate students is the same as the undergraduate student policy.
  - Once the student has exceeded the *SRU Repeat of Courses Policy*, the student will have their major changed to Exploratory and HCAM Major courses will be removed from their schedule.
  - Additional costs associated with the HCAM major:
    - Lab fees will be collected for classes with a lab component. This fee enhances the University's ability to offer a high-quality program.
    - A student in the HCAM major may be required to purchase Student Professional Liability Insurance while enrolled in HCAM 450 at their own cost. More information will be provided to students in the upper level HCAM courses.
    - HCAM 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

## Related Links

Healthcare Administration and Management - Finance, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/health-care-administration-and-management/>)

Healthcare Administration Department Page (<https://www.sru.edu/academics/colleges-and-departments/cohp/departments/health-care-administration-and-management/hcam-programs/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

2.0 GPA overall or higher to declare HCAM as major  
2.0 GPA or higher in the major to graduate in HCAM

2.0 GPA or higher and instructor permission to apply for the internship

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements/Concentration	60
	Electives	18

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
Required Thematic Thread Coursework:		
ECON 202	Principles of Microeconomics (Must be included as part of the 12 Thematic Thread credits)	

**Total Hours** **42**

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements/Concentration

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Basic Courses</b>		
HCAM 230	US Healthcare Systems <sup>1</sup>	3
HCAM 360	Healthcare Organizational Dynamics <sup>1</sup>	3
HCAM 450	Internship-Health Care Administration & Management <sup>1</sup>	3
HCAM 499	Health Care Theory and Research Capstone Seminar <sup>1</sup>	3
<b>Financial Management Core Courses</b>		
ACCT 209	Financial Accounting	3
ACCT 230	Accounting Information Systems	3
ACCT 310	Cost Accounting	3
Select one of the following: <sup>1</sup>		3
MATH 117	Quantitative Reasoning	
MATH 123	Introduction to Applied Calculus	
MATH 225	Calculus I	
FIN 320	Managerial Finance (R) <sup>1</sup>	3
FIN 326	Intermediate Corporate Finance <sup>1</sup>	3
HCAM 305	Health Care Quality & Process Improvement	3
HCAM 385		3

HCAM 430	Finance for Healthcare Organizations	3
HCAM 480	Healthcare Value-Based Reimbursement Systems	3
MIS 210	Productivity Software	3
MIS 310	Business Data Analysis and Visualization	3
<b>Additional Required Coursework (12 credits)</b>		
HCAM 265	Managed Care & Insurance	3
HCAM 275	Health Care Legal & Ethical Foundations	3
HCAM 400	Legal Environment of Healthcare	3
or ACCT 400	Legal Environment of Healthcare	
HLTH 210	Introduction to Public Health	3
or HCAM 200	Introduction to Population Health	
<b>Total Hours</b>		<b>60</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership development
5. Service-learning classes
6. Career education and development
7. Internships
8. Volunteering in healthcare industry related settings
9. Job Shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

HEALTH CARE ADMINISTRATION & MANAGEMENT - BS (2346)

Concentration in Financial Management (FINM)

This program is effective as of Summer 2022

Revised 02.23.2023

UCC 02.14.2023

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
HCAM 230	US Healthcare Systems	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Select one of the following:		3-4
MATH 117	Quantitative Reasoning (RSP)	
MATH 123	Introduction to Applied Calculus (RSP)	
MATH 225	Calculus I (RSP)	
<b>Hours</b>		<b>16-17</b>
<b>Spring</b>		
HCAM 265	Managed Care & Insurance	3
ENGL 104	Critical Reading	3
HLTH 210 or HCAM 200	Introduction to Public Health or Introduction to Population Health	3
ACCT 209	Financial Accounting	3
MIS 210	Productivity Software	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
HCAM 275	Health Care Legal & Ethical Foundations	3
ACCT 230	Accounting Information Systems	3
Creative & Aesthetic Inquiry (p. 29)		3
Thematic Thread Requirement ECON 202 Principles of Microeconomics		3
SCI 101	Science of Life	3
Declare a Thematic Thread <sup>4</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ACCT 310	Cost Accounting	3
SCI 102	Understanding the Physical World	3
FIN 320	Managerial Finance	3
STAT 152	Elementary Statistics I	3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
HCAM 430	Finance for Healthcare Organizations	3
HCAM 305	Health Care Quality & Process Improvement	3
FIN 329	Principles of Insurance	3
Humanities Inquiry (p. 29)		3
Thematic Thread Requirement (Upper Level) (p. 29)		3
<b>Hours</b>		<b>15</b>

<b>Spring</b>		
HCAM 360	Healthcare Organizational Dynamics	3
HCAM 400 or ACCT 400	Legal Environment of Healthcare <sup>2</sup> or Legal Environment of Healthcare	3
HCAM 480	Healthcare Value-Based Reimbursement Systems	3
FIN 326	Intermediate Corporate Finance	3
MIS 310	Business Data Analysis and Visualization	3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
HCAM 450 or HCAM 499	Internship-Health Care Administration & Management <sup>3</sup> or Health Care Theory and Research Capstone Seminar	3
Thematic Thread Requirement (Upper Level) (p. 29)		3
Social Science Inquiry (p. 29)		3
Free Elective (Recommend HCAM or in Minor) <sup>3</sup>		3
Free Elective (Recommend HCAM or in Minor) <sup>3</sup>		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
HCAM 499 or HCAM 450	Health Care Theory and Research Capstone Seminar <sup>3</sup> or Internship-Health Care Administration & Management	3
Free Elective (Recommended HCAM or in Minor) <sup>3</sup>		3
Free Elective (Recommend HCAM or in Minor) <sup>3</sup>		3
Free Elective (Recommended HCAM or in Minor) <sup>3</sup>		3
Free Elective (Recommended HCAM or in Minor) <sup>3</sup>		3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>121-122</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Must have "Sufficient Academic Performance" and earn "C" or better in the course. Please refer to the Academic Policies for Students in the HCAM major.

<sup>3</sup> Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

<sup>4</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 2346

Concentration Code: FINM

Revised: 06.07.2022

## HCAM, Bachelor of Science (BS) - Concentration in Information Systems

**1 Knowledge of the Healthcare Environment:** Students will demonstrate an accurate understanding of:

- Health care system structures.
- Reimbursement/payment models.
- Factors associated with population health.

(UG 02, UG 09)

**2 Business Technology and Analytics:** Students will articulate an applied understanding of key quality improvement metrics and methods to support evidence-based practice guidelines including:

- Demonstrate knowledge, skills and abilities to plan for and ensure the security, integrity, and privacy of data and confidentiality of the end user.
- Demonstrate an ability to identify, aggregate, and summarize technical information for technical and non-technical personnel.

(UG 02, UG 10)

**3 Communication and Relationship Management:** Students will demonstrate the ability to interact and communicate effectively by:

- Presenting information in oral and written formats.
- Collaborating effectively with others.

(UG 01, UG 05, UG 08, UG 09)

**4 Financial Management and Economic Reasoning:** Students will demonstrate:

- An ability to analyze, quantify, evaluate and determine the sound allocation of financial resources.
- An ability to apply economic concepts for efficient allocation of scarce resources.

(UG 02, UG 04)

**5 Healthcare Legal Environment and Ethics:** Students will be able to:

- Recognize will ethical dilemmas in healthcare.
- Recognize key healthcare legal and regulatory environment parameters.
- Demonstrate discern viable options for ethical guided decision-making processes.
- Demonstrate applied legal and regulatory reasoning.

(UG 02, UG 05, UG 07, UG 08, UG 09)

**6 Organizational Dynamics:** Students will articulate an applied understanding of:

- Organizational mission, vision, and culture.
- Behaviors associated with organizational commitment and job performance.

(UG 05, UG 07, UG 08, UG 09)

## Academic Policies for Students in the Health Care Administration and Management (HCAM) Major

*Effective for all Health Care Administration and Management (HCAM) Majors beginning Fall 2021*

1. Policy for earning acceptable grades in the HCAM program:
  - a. A student must earn a grade of "C" or better in ALL Required Basic Courses (HCAM 230, HCAM 265, HCAM 275) and Required Upper-Level Courses (HCAM 305, HCAM 360, HCAM 400, HCAM 430, HCAM 450, HCAM 480, and HCAM 499).
  - b. A student must earn a grade of "C" or better in ALL non-HCAM major Requirements (ACCT 209, ACCT 340, ECON 312, HLTH 210, and MIS 210, STAT 152 or ECON 219/MGMT 219).
  - c. The HCAM curriculum is structured with pre-requisites. A student must earn a "C" or better in the pre-requisite course to be able to take the next course. See course catalog for pre-requisites.
  - d. If a student does not earn a "C" or better, they will be required to:
    - i. Retake the course
    - ii. They will be dropped from any course(s) in the following semester that requires a "C" or better as a pre-requisite (see course catalog for pre-requisites)
    - iii. Students will need to meet with their Academic Advisor and change their schedule accordingly
2. SRU has a *Repeat of Courses Policy* as follows and it can be found in the course catalog: **Repeat of Courses < Slippery Rock University (sru.edu)**
  - a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade. Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis. Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades. In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for post-baccalaureate students is the same as the undergraduate student policy.
3. Once the student has exceeded the *SRU Repeat of Courses Policy*, the student will have their major changed to Exploratory and HCAM Major courses will be removed from their schedule.
4. Additional costs associated with the HCAM major:
  - a. Lab fees will be collected for classes with a lab component. This fee enhances the University's ability to offer a high-quality program.
  - b. A student in the HCAM major may be required to purchase Student Professional Liability Insurance while enrolled in

HCAM 450 at their own cost. More information will be provided to students in the upper level HCAM courses.

- c. HCAM 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

## Related Links

Healthcare Administration and Management - Information Systems, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/health-care-administration-and-management/>)

Healthcare Administration Department Page (<https://www.sru.edu/academics/colleges-and-departments/cohp/departments/health-care-administration-and-management/hcam-programs/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

- 2.0 GPA overall or higher to declare HCAM as major
- 2.0 GPA or higher in the major to graduate in HCAM
- 2.0 GPA or higher and instructor permission to apply for the internship

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements/Concentration	60
	Electives	18

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

#### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3

<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
Required Thematic Thread Coursework:		
ECON 202	Principles of Microeconomics (Must be included as part of the 12 Thematic Thread credits)	
<b>Total Hours</b>		<b>42</b>

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.
- <sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.



## Major Requirements/Concentration

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Basic Courses</b>		
HCAM 230	US Healthcare Systems <sup>1</sup>	3
HCAM 360	Healthcare Organizational Dynamics <sup>1</sup>	3
HCAM 450	Internship-Health Care Administration & Management <sup>1</sup>	3
HCAM 499	Health Care Theory and Research Capstone Seminar <sup>1</sup>	3
Subtotal		12
<b>Information Systems Core Courses</b>		
HCAM 305	Health Care Quality & Process Improvement <sup>1</sup>	3
HCAM 400 or ACCT 400	Legal Environment of Healthcare <sup>1</sup>	3
MIS 210	Productivity Software <sup>1</sup>	3
MIS 310	Business Data Analysis and Visualization <sup>1</sup>	3
MIS 323	Data Base Systems <sup>1</sup>	3
MIS 403	Introduction to Healthcare Information Systems <sup>1</sup>	3
MIS 413	Systems Analysis <sup>1</sup>	3
MIS 443	Project Management <sup>1</sup>	3
Subtotal		24
<b>Additional Required Coursework</b>		
ACCT 209	Financial Accounting <sup>1</sup>	3
HCAM 265	Managed Care & Insurance	3
HCAM 385		3
HCAM 275	Health Care Legal & Ethical Foundations <sup>1</sup>	3
Select one of the following: <sup>1</sup>		3
ECON 312	Critical Choices in Health Care Policy	
HCAM 300	Healthcare Systems: Global Perspectives and Analysis	
HCAM 430	Finance for Healthcare Organizations <sup>1</sup>	3
HCAM 480	Healthcare Value-Based Reimbursement Systems <sup>1</sup>	3
HLTH 210 or HCAM 200	Introduction to Public Health <sup>1</sup> Introduction to Population Health	3
Subtotal		24
<b>Total Hours</b>		<b>60</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-Curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership development
5. Service-learning classes
6. Career education and development
7. Internships
8. Volunteering in healthcare industry related settings
9. Job Shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

HEALTH CARE ADMINISTRATION & MANAGEMENT - BS (2346)

Concentration in Information Systems (INSY)

This program is effective as of Summer 2022

Revised 02.23.2023

UCC 02.14.2023

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
HCAM 230	US Healthcare Systems	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
STAT 152	Elementary Statistics I	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
HCAM 265	Managed Care & Insurance	3
ENGL 104	Critical Reading	3
HLTH 210 or HCAM 200	Introduction to Public Health or Introduction to Population Health	3
SCI 101	Science of Life	3
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
HCAM 275	Health Care Legal & Ethical Foundations	3
MIS 210	Productivity Software	3
SCI 102	Understanding the Physical World	3

Humanities Inquiry (p. 29)	3
Thematic Thread Requirement ECON 202 Principles of Microeconomics	3
Declare a Thematic Thread <sup>4</sup>	
<b>Hours</b>	<b>15</b>

<b>Spring</b>	
HCAM 360 Healthcare Organizational Dynamics	3
ACCT 209 Financial Accounting	3
MIS 310 Business Data Analysis and Visualization	3
Thematic Thread Requirement (p. 29)	3
Free Elective (Recommend HCAM or in Minor) <sup>2</sup>	
<b>Hours</b>	<b>12</b>

**Third Year****Fall**

HCAM 305 Health Care Quality & Process Improvement	3
HCAM 430 Finance for Healthcare Organizations	3
FIN 329 Principles of Insurance	3
MIS 413 Systems Analysis	3
Thematic Thread Requirement (Upper Level) (p. 29)	3
<b>Hours</b>	<b>15</b>

**Spring**

HCAM 400 or ACCT 400 Legal Environment of Healthcare <sup>3</sup> or Legal Environment of Healthcare	3
HCAM 480 Healthcare Value-Based Reimbursement Systems	3
MIS 323 Data Base Systems	3
MIS 403 Introduction to Healthcare Information Systems	3
ECON 312 or HCAM 300 Critical Choices in Health Care Policy or Healthcare Systems: Global Perspectives and Analysis	3
<b>Hours</b>	<b>15</b>

**Fourth Year****Fall**

HCAM 450 or HCAM 499 Internship-Health Care Administration & Management <sup>3</sup> or Health Care Theory and Research Capstone Seminar	3
Social Science Inquiry (p. 29)	3
Thematic Thread Requirement (Upper Level) (p. 29)	3
Free Elective (Recommend HCAM or in Minor) <sup>2</sup>	3
Free Elective (Recommend HCAM or in Minor) <sup>2</sup>	3
<b>Hours</b>	<b>15</b>

**Spring**

HCAM 499 or HCAM 450 Health Care Theory and Research Capstone Seminar <sup>3</sup> or Internship-Health Care Administration & Management	3
MIS 443 Project Management	3
Free Elective (Recommend HCAM or in Minor) <sup>2</sup>	3
Free Elective (Recommend HCAM or in Minor) <sup>2</sup>	3

Free Elective (Recommend HCAM or in Minor) <sup>2</sup>	3
<b>Hours</b>	<b>15</b>
<b>Total Hours**</b>	<b>118</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Course may have a prerequisite

<sup>3</sup> Must have "Sufficient Academic Performance" and earn "C" or better in the course. Please refer to the Academic Policies for Students in the HCAM major.

<sup>4</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 2346

Concentration Code: INFM

Revised: 06.07.2022

## HCAM, Bachelor of Science (BS) - Concentration in Leadership

**1 Knowledge of the Healthcare Environment:** Students will demonstrate an accurate understanding of:

- Health care system structures.
- Reimbursement/payment models.
- Factors associated with population health.

(UG 02, UG 09)

**2 Business Technology and Analytics:** Students will articulate an applied understanding of key quality improvement metrics and methods to support evidence-based practice guidelines including:

- Demonstrate knowledge, skills and abilities to plan for and ensure the security, integrity, and privacy of data and confidentiality of the end user.
- Demonstrate an ability to identify, aggregate, and summarize technical information for technical and non-technical personnel.

(UG 02, UG 10)

**3 Communication and Relationship Management:** Students will demonstrate the ability to interact and communicate effectively by:

- Presenting information in oral and written formats.
- Collaborating effectively with others.

(UG 01, UG 05, UG 08, UG 09)

**4 Financial Management and Economic Reasoning:** Students will demonstrate:

- An ability to analyze, quantify, evaluate and determine the sound allocation of financial resources.

- An ability to apply economic concepts for efficient allocation of scarce resources.

(UG 02, UG 04)

**5 Healthcare Legal Environment and Ethics:** Students will be able to:

- Recognize will ethical dilemmas in healthcare.
- Recognize key healthcare legal and regulatory environment parameters.
- Demonstrate discern viable options for ethical guided decision-making processes.
- Demonstrate applied legal and regulatory reasoning.

(UG 02, UG 05, UG 07, UG 08, UG 09)

**6 Organizational Dynamics:** Students will articulate an applied understanding of:

- Organizational mission, vision, and culture.
- Behaviors associated with organizational commitment and job performance.

(UG 05, UG 07, UG 08, UG 09)

## Academic Policies for Students in the Health Care Administration and Management (HCAM) Major

*Effective for all Health Care Administration and Management (HCAM) Majors beginning Fall 2021*

1. Policy for earning acceptable grades in the HCAM program:
  - a. A student must earn a grade of "C" or better in ALL Required Basic Courses (HCAM 230, HCAM 265, HCAM 275) and Required Upper-Level Courses (HCAM 305, HCAM 360, HCAM 400, HCAM 430, HCAM 450, HCAM 480, and HCAM 499).
  - b. A student must earn a grade of "C" or better in ALL non-HCAM major Requirements (ACCT 209, ACCT 340, ECON 312, HLTH 210, and MIS 210, STAT 152 or ECON 219/MGMT 219).
  - c. The HCAM curriculum is structured with pre-requisites. A student must earn a "C" or better in the pre-requisite course to be able to take the next course. See course catalog for pre-requisites.
  - d. If a student does not earn a "C" or better, they will be required to:
    - i. Retake the course
    - ii. They will be dropped from any course(s) in the following semester that requires a "C" or better as a pre-requisite (see course catalog for pre-requisites)
    - iii. Students will need to meet with their Academic Advisor and change their schedule accordingly
2. SRU has a *Repeat of Courses Policy* as follows and it can be found in the course catalog: **Repeat of Courses < Slippery Rock University (sru.edu)**
  - a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an

earned grade. Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis. Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades. In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for post-baccalaureate students is the same as the undergraduate student policy.

3. Once the student has exceeded the *SRU Repeat of Courses Policy*, the student will have their major changed to Exploratory and HCAM Major courses will be removed from their schedule.
4. Additional costs associated with the HCAM major:
  - a. Lab fees will be collected for classes with a lab component. This fee enhances the University's ability to offer a high-quality program.
  - b. A student in the HCAM major may be required to purchase Student Professional Liability Insurance while enrolled in HCAM 450 at their own cost. More information will be provided to students in the upper level HCAM courses.
  - c. HCAM 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

## Related Links

Healthcare Administration and Management - Leadership, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/health-care-administration-and-management/>)

Healthcare Administration Department Page (<https://www.sru.edu/academics/colleges-and-departments/cohp/departments/health-care-administration-and-management/hcam-programs/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

2.0 GPA overall or higher to declare HCAM as major

2.0 GPA or higher in the major to graduate in HCAM

2.0 GPA or higher and instructor permission to apply for the internship

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	60
	Electives	18

\* All undergraduate degree programs require a minimum of 120 credits.  
Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Social Science Inquiry (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
Required Thematic Thread Coursework:		
ECON 202	Principles of Microeconomics (Must be included as part of the 12 Thematic Thread credits)	
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Core Courses</b>		
HCAM 230	US Healthcare Systems <sup>1</sup>	3
HCAM 360	Healthcare Organizational Dynamics <sup>1</sup>	3
HCAM 450	Internship-Health Care Administration & Management <sup>1</sup>	3
HCAM 499	Health Care Theory and Research Capstone Seminar <sup>1</sup>	3
Subtotal		12
<b>Leadership Core Courses</b>		
HCAM 275	Health Care Legal & Ethical Foundations <sup>1</sup>	3
HCAM 305	Health Care Quality & Process Improvement <sup>1</sup>	3
HCAM 400 or ACCT 400	Legal Environment of Healthcare <sup>1</sup>	3
HCAM 425	Long Term Care Management <sup>1</sup>	3
HCAM 470	Healthcare Practice Management <sup>1</sup>	3
HLTH 210 or HCAM 200	Introduction to Public Health <sup>1</sup>	3
MGMT 320	Operations Management	3
MGMT 354	Human Resources Management	3
MIS 210	Productivity Software <sup>1</sup>	3
MIS 310	Business Data Analysis and Visualization <sup>1</sup>	3
<b>Additional Required Coursework</b>		
ACCT 209	Financial Accounting <sup>1</sup>	3
HCAM 265	Managed Care & Insurance	3
HCAM 385		3
HCAM 430	Finance for Healthcare Organizations <sup>1</sup>	3
HCAM 480	Healthcare Value-Based Reimbursement Systems <sup>1</sup>	3
HCAM 300	Healthcare Systems: Global Perspectives and Analysis <sup>1</sup>	3

or ECON 312	Critical Choices in Health Care Policy	
Subtotal		48
<b>Total Hours</b>		<b>60</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership development
5. Service-learning classes
6. Career education and development
7. Internships
8. Volunteering in healthcare industry related settings
9. Job Shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

HEALTH CARE ADMINISTRATION & MANAGEMENT - BS (2346)

Concentration in Leadership (LSHP)

This program is effective as of Summer 2022

Revised 02.23.2023

UCC 02.14.2023

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
HCAM 230	US Healthcare Systems	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	

STAT 152	Elementary Statistics I	3
<b>Hours</b>		<b>16</b>

### Spring

HCAM 265	Managed Care & Insurance	3
ENGL 104	Critical Reading	3
HLTH 210	Introduction to Public Health	3
or HCAM 200	or Introduction to Population Health	
SCI 101	Science of Life	3
Creative & Aesthetic Inquiry (p. 29)		3

**Hours** **15**

### Second Year

#### Fall

HCAM 275	Health Care Legal & Ethical Foundations	3
ACCT 209	Financial Accounting	3
SCI 102	Understanding the Physical World	3
Humanities Inquiry (p. 29)		3
Thematic Thread Requirement ECON 202 Principles of Microeconomics		3
Declare a Thematic Thread <sup>4</sup>		

**Hours** **15**

#### Spring

HCAM 360	Healthcare Organizational Dynamics	3
MIS 210	Productivity Software	3
FIN 329	Principles of Insurance	3
Social Science Inquiry (p. 29)		3
Thematic Thread Requirement (p. 29)		3

**Hours** **15**

### Third Year

#### Fall

HCAM 305	Health Care Quality & Process Improvement	3
HCAM 470	Healthcare Practice Management	3
MIS 310	Business Data Analysis and Visualization	3
ECON 312	Critical Choices in Health Care Policy	3
or HCAM 300	or Healthcare Systems: Global Perspectives and Analysis	
MGMT 320	Operations Management	3

**Hours** **15**

#### Spring

HCAM 480	Healthcare Value-Based Reimbursement Systems	3
HCAM 400	Legal Environment of Healthcare <sup>4</sup>	3
or ACCT 400	or Legal Environment of Healthcare	
MGMT 354	Human Resources Management	3
HCAM 425	Long Term Care Management	3
Free Elective (Recommend HCAM or in Minor) <sup>2</sup>		3

**Hours** **15**

### Fourth Year

#### Fall

HCAM 450	Internship-Health Care Administration & Management <sup>3</sup>	3
or HCAM 499	or Health Care Theory and Research Capstone Seminar	



Thematic Thread Requirement (Upper Level) (p. 29)	3
HCAM 430 Finance for Healthcare Organizations	3
Free Elective (Recommend HCAM or in Minor) <sup>2</sup>	3
Free Elective (Recommend HCAM or in Minor) <sup>2</sup>	3
<b>Hours</b>	<b>15</b>
<b>Spring</b>	
HCAM 499 or HCAM 450 Health Care Theory and Research Capstone Seminar <sup>3</sup> or Internship-Health Care Administration & Management	3
Thematic Thread Requirement (Upper Level) (p. 29)	3
Free Elective (Recommended HCAM or in Minor) <sup>2</sup>	3
Free Elective (Recommended HCAM or in Minor) <sup>2</sup>	3
Free Elective (Recommended HCAM or in Minor) <sup>2</sup>	3
<b>Hours</b>	<b>15</b>
<b>Total Hours**</b>	<b>121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Course may have a prerequisite

<sup>3</sup> Must have "Sufficient Academic Performance" and earn "C" or better in the course. Please refer to the Academic Policies for Students in the HCAM major.

<sup>4</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 2346

Concentration Code: LSHP

Revised: 06.07.2022

## HCAM, Bachelor of Science (BS) - Concentration in Leadership - Online

**1 Knowledge of the Healthcare Environment:** Students will demonstrate an accurate understanding of:

- Health care system structures.
- Reimbursement/payment models.
- Factors associated with population health.

(UG 02, UG 09)

**2 Business Technology and Analytics:** Students will articulate an applied understanding of key quality improvement metrics and methods to support evidence-based practice guidelines including:

- Demonstrate knowledge, skills and abilities to plan for and ensure the security, integrity, and privacy of data and confidentiality of the end user.

- Demonstrate an ability to identify, aggregate, and summarize technical information for technical and non-technical personnel.

(UG 02, UG 10)

**3 Communication and Relationship Management:** Students will demonstrate the ability to interact and communicate effectively by:

- Presenting information in oral and written formats.
- Collaborating effectively with others.

(UG 01, UG 05, UG 08, UG 09)

**4 Financial Management and Economic Reasoning:** Students will demonstrate:

- An ability to analyze, quantify, evaluate and determine the sound allocation of financial resources.
- An ability to apply economic concepts for efficient allocation of scarce resources.

(UG 02, UG 04)

**5 Healthcare Legal Environment and Ethics:** Students will be able to:

- Recognize will ethical dilemmas in healthcare.
- Recognize key healthcare legal and regulatory environment parameters.
- Demonstrate discern viable options for ethical guided decision-making processes.
- Demonstrate applied legal and regulatory reasoning.

(UG 02, UG 05, UG 07, UG 08, UG 09)

**6 Organizational Dynamics:** Students will articulate an applied understanding of:

- Organizational mission, vision, and culture.
- Behaviors associated with organizational commitment and job performance.

(UG 05, UG 07, UG 08, UG 09)

## Related Links

Online Degree Completion Undergraduate Programs Page (<https://www.sru.edu/academics/online-learning/online-degree-completion-ug-programs/>)

Healthcare Administration Department Page (<https://www.sru.edu/academics/colleges-and-departments/cohp/departments/health-care-administration-and-management/hcam-programs/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

2.0 GPA overall or higher to declare HCAM as major

2.0 GPA or higher in the major to graduate in HCAM

2.0 GPA or higher and instructor permission to apply for the internship

## Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	57
	Electives	21

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Students must complete a sum total of 42 SRU Rock Studies 2-based credits. There are no specific requirements.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
	Complete one of the following:	0-3
	Meet required minimum SAT or ACT math score OR	
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
	Demonstrate "computer competency" by one of the following:	0-3
	Pass Computer Competency Exam OR	
	Select one of the following at SRU or another post-secondary institution:	
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements <sup>1</sup>

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Core Courses</b>		
ACCT 209	Financial Accounting	3
HCAM 200	Introduction to Population Health	3
or HLTH 210	Introduction to Public Health	
HCAM 385		3

HCAM 230	US Healthcare Systems	3
HCAM 265	Managed Care & Insurance	3
HCAM 275	Health Care Legal & Ethical Foundations	3
HCAM 300	Healthcare Systems: Global Perspectives and Analysis	3
or ECON 312	Critical Choices in Health Care Policy	
HCAM 305	Health Care Quality & Process Improvement	3
HCAM 360	Healthcare Organizational Dynamics	3
HCAM 400	Legal Environment of Healthcare	3
or ACCT 400	Legal Environment of Healthcare	
HCAM 430	Finance for Healthcare Organizations	3
HCAM 480	Healthcare Value-Based Reimbursement Systems	3
HCAM 499	Health Care Theory and Research Capstone Seminar	3
MIS 210	Productivity Software	3
Select one of the following:		3
ECON 219	Business Analytics I	
MGMT 219	Business Analytics I	
STAT 152	Elementary Statistics I	
<b>Subtotal</b>		<b>45</b>

### Leadership Concentration Courses

HCAM 470	Healthcare Practice Management	3
MGMT 320	Operations Management	3
MGMT 354	Human Resources Management	3
MIS 403	Introduction to Healthcare Information Systems	3
Select one of the following:		3
HCAM 425	Long Term Care Management	
HCAM 195	Health Care Workshop	
HCAM 295	Health Care Workshop	
HCAM 395	Health Care Workshop	
HCAM 495	Health Care Workshop	
HCAM 198	Selected Topics	
HCAM 298	Selected Topics	
HCAM 398	Selected Topics	
HCAM 498	Selected Topics	
<b>Subtotal</b>		<b>15</b>
<b>Total Hours</b>		<b>60</b>

<sup>1</sup> Courses count for 50% of Major requirements and Major GPA

<sup>2</sup> Students must complete ECON 202 (or transfer in the equivalent) to meet the required prerequisite for ECON 312.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership development
5. Service-learning classes
6. Career education and development
7. Internships
8. Volunteering in healthcare industry related settings
9. Job Shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

HEALTH CARE ADMINISTRATION & MANAGEMENT - BS (2340)

Concentration in Leadership (LDRO)

This program is effective as of Summer 2022

Revised 02.23.2023

UCC 02.14.2023

## HCAM, Bachelor of Science (BS) - Concentration in Leadership / Pre-Occupational Therapy (SRU) (3+3)

### What are your options?

**Pre-Occupational Therapy SRU 3+3:** Earn a Doctor of Occupational Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU OTD program. At the end of your second year, you apply for admission into the SRU OTD program. If accepted, your first year in the SRU OTD program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Occupational Therapy (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU OTD program and apply to the SRU OTD program in your senior year.

## Academic Policies for Students in the Health Care Administration and Management (HCAM) Major

*Effective for students entering the major Fall 2017 and after*

1. Policy for achieving and maintaining "Sufficient Academic Performance"<sup>1</sup>
  - a. At the end of the semester in which a student has earned 40 credits (and every semester thereafter), the Major and Overall GPA will be reviewed:

- i. A student must earn a 2.50 Major GPA to achieve "Sufficient Academic Performance" and continue in the HCAM major.
- ii. A student earning below a 2.50 in the Major GPA at any time after earning 40 credits will be placed on a "one semester probation."<sup>2</sup> He/she must increase his/her GPA to 2.50 or higher by the end of the "one semester probation" or be **permanently** removed from the HCAM major. The student will be notified by email of his/her status following the "one semester probation." A student who has not achieved "Sufficient Academic Performance" will have his/her major changed to Exploratory.
- iii. A student can be placed on a "one semester probation" a maximum of two times as an HCAM major. He/she will be **permanently** removed from the HCAM major if his/her Major GPA drops below a 2.50 a third time.
- iv. A student on a "one semester probation" may not enroll in required 400 Level Courses unless he/she is repeating the course(s).

- b. A transfer student who enters from another university or a Slippery Rock University student who changes his/her major to HCAM:
    - i. With 40 or more earned credits will have a one-semester extension before his/her Major GPA are reviewed to determine if he/she has achieved "Sufficient Academic Performance".
    - ii. With less than 40 earned credits will follow Policy I. A above.
  - c. An incoming FYRST student earning college credits prior to entering SRU may reach 40 credits before completing two semesters at SRU. In this case, the review to determine "Sufficient Academic Performance" will not begin until the student has completed two semesters as a student in the HCAM major.
2. Policy for earning acceptable grades in Required 400 Level Courses
    - a. A student must earn a grade of "C" or better in Required 400 Level Courses.
    - b. A student will not be permitted to begin an internship unless he/she has "Sufficient Academic Performance" and he/she has earned a grade of "C" or better in Required 400 Level Courses.
    - c. A student must also earn a grade of "C" or better in HCAM 305, HCAM 400, HCAM 410<sup>3</sup>, HCAM 430 and MIS 403 before he/she is allowed to take HCAM 499<sup>4</sup> and HCAM 450<sup>4</sup>.
  3. Policy for changing to the HCAM major
    - a. A Slippery Rock University student wishing to change his/her major to Health Care Administration and Management must have an overall GPA of 2.00.
  4. Additional costs associated with the HCAM major
    - a. A student in the HCAM major is required to maintain a current Student Professional Liability Insurance and meet any immunization or physical requirements set forth by an internship employer while enrolled in HCAM 450 at his/her own cost.

<sup>1</sup> "Sufficient Academic Performance" is defined as having a Major GPA of 2.50 or higher. The Major GPA is comprised of Required Basic Courses, Required 300 and 400 Level HCAM Courses. Please see My Rock Audit for specific courses.

<sup>2</sup> "One semester probation" is defined as the initial semester after which "Sufficient Academic Performance" was not achieved and the first occurring summer.

<sup>3</sup> If taken – HCAM 410 is an elective for non 3+2 PA or 3+3 PT majors

<sup>4</sup> If required – not required for 3+2 PA or 3+3 PT majors

## Related Links

Healthcare Administration and Management - Pre-Occupational Therapy, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/health-care-administration-and-management-pre-occupational-therapy/>)

Healthcare Administration Department Page (<https://www.sru.edu/academics/colleges-and-departments/cohp/departments/health-care-administration-and-management/hcam-programs/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

#### 1st Major: HCAM

- Overall GPA: 2.0 or higher
- Major GPA (includes Major Requirements): 2.0 or higher

#### 2nd Major: Pre-OT 3+3 HCAM

- Overall GPA: 3.00 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	44
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	52
	Electives	24

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the 1<sup>st</sup> year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

#### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3

<i>Physical &amp; Natural Sciences Inquiry</i>		
BIOL 209		4
PHYS 201	Elements of Physics I with Lab	4
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
Required Thematic Thread Coursework:		
ECON 202	Principles of Microeconomics (Must be included as part of the 12 Thematic Thread credits)	
PSYC 105	Introduction to Psychology (Must be included as part of the 12 Thematic Thread credits)	
<b>Total Hours</b>		<b>44</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

### Major Requirements

- If you choose to pursue Pre-Occupational Therapy SRU 3+3 Health Care Administration and Management (HCAM) and are not accepted

into the OTD program, then the following additional HCAM courses are required to complete a first major of HCAM: HCAM Internship (HCAM 450) – **Plus** – courses necessary to satisfy the Leadership specialty track. Please refer to the HCAM curriculum guide.

Code	Title	Hours
<b>Required Basic Courses</b>		
ACCT 209	Financial Accounting <sup>1</sup>	3
HCAM 230	US Healthcare Systems <sup>1</sup>	3
HCAM 275	Health Care Legal & Ethical Foundations <sup>1,2</sup>	3
HLTH 210	Introduction to Public Health <sup>1</sup>	3
or HCAM 200	Introduction to Population Health	
MIS 210	Productivity Software <sup>1</sup>	3
Subtotal		15
<b>Required Upper Level Courses (24 credits if accepted to SRU DOT Program) <sup>2</sup></b>		
Must have achieved "Sufficient Academic Performance" to take these courses. Must earn a "C" or better in all of the following courses:		
HCAM 265	Managed Care & Insurance	3
HCAM 305	Health Care Quality & Process Improvement <sup>1</sup>	3
HCAM 360	Healthcare Organizational Dynamics <sup>1</sup>	3
HCAM 400	Legal Environment of Healthcare <sup>1</sup>	3
or ACCT 400	Legal Environment of Healthcare	
HCAM 430	Finance for Healthcare Organizations <sup>1</sup>	3
HCAM 470	Healthcare Practice Management	3
HCAM 480	Healthcare Value-Based Reimbursement Systems <sup>1</sup>	3
HCAM 499	Health Care Theory and Research Capstone Seminar <sup>1</sup>	3
Subtotal		24
<b>Additional Occupational Therapy Prerequisite Courses</b>		
(see below for all Admission Requirements)		
BIOL 309		4
EXSC 250	Medical Terminology	3
Select three credits of the following:		3
INDP 106	Race and Ethnic Diversity in the USA	
INDP 202	Introduction to Anthropology	
INDP 310	Cultural Area Studies	
INDP 321	Minority Groups	
SOWK 105	Human Diversity	
Select three credits of the following:		3
PSYC 240	Human Sexual Behavior	
PSYC 244	Developmental Psychology	
PSYC 276	Introduction to Abnormal Psychology	
Subtotal		13
<b>Total Hours</b>		<b>52</b>

<sup>1</sup> Course counts for 50% of Major and Major GPA

<sup>2</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. These opportunities can deepen and enhance the learning in accounting, economics and finance. In addition, there is a strong correlation between long-term student success and engagement in these opportunities:

1. Internships
2. Participation in student organizations
3. International study programs (short-term, semester, and year-long)
4. High-Impact Practice (HIP) designated classes
5. Student-faculty research
6. Student leadership development
7. Service-learning classes
8. Career education and development

## Doctor of Occupational Therapy (OTD) Prerequisite Admission Requirements – Pre-Occupational Therapy SRU 3+3

### For Application Requirements

Please refer to Slippery Rock University's Occupational Therapy Studies (Master of Science in Occupational Therapy Studies) website for requirements: <http://www.sru.edu/OT> (<http://www.sru.edu/OT/>)

### Rock Studies 2

Code	Title	Hours
<b>Prerequisite Courses - SRU Occupational Therapy</b>		
BIOL 209		4
BIOL 309		4
EXSC 250	Medical Terminology	3
or HCAM 250	Medical Terminology for Healthcare Administrators	
PHYS 201	Elements of Physics I with Lab	4
or PE 364	Biomechanics of Individuals with Disabilities	
STAT 152	Elementary Statistics I	3
PSYC 105	Introduction to Psychology	3
PSYC 244	Developmental Psychology	3
PSYC 276	Introduction to Abnormal Psychology	3
Anthropology or Sociology <sup>1</sup>		3
INDP 106	Race and Ethnic Diversity in the USA	
INDP 202	Introduction to Anthropology	
INDP 211	Biological Anthropology	
INDP 309	Health and Society	
INDP 310	Cultural Area Studies	
INDP 321	Minority Groups	
INDP 324	The Family	
INDP 326	Society, Culture and Self	
INDP 339	Gender Roles and Society	
INDP 342	Sociology of Aging	
RCTH 120	Disability, Community Inclusion, and Diversity	
SOWK 105	Human Diversity	



Research Methods - Select One: <sup>1</sup>		3
EXSC 300	Research Methods in Exercise Science	
HCAM 499	Health Care Theory and Research Capstone Seminar	
INDP 318	Research Methods in Interdisciplinary Studies	
PSYC 231/232	Psychological Science I: Research Methods	
SOWK 318	Research Methods	
<b>Total Hours</b>		<b>33</b>

<sup>1</sup> Select one course. See *My Rock Audit* for specific courses.

### Pre-Occupational Therapy SRU 3+3

If any of these requirements are not met, the 3+3 designation will be removed from the student's record:

1. A 3.0 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Occupational Therapy SRU 3+3 program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

### Provision

Should a Pre-Occupational Therapy SRU 3+3 student be unsuccessful in completing the 1<sup>st</sup> two semesters (summer or fall) of the Occupational Therapy Program and wants to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, Occupational Therapy courses will count toward the completion of his/her undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the Doctor of Occupational Therapy Program with an earned Bachelor's degree.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

HEALTH CARE ADMINISTRATION & MANAGEMENT - BS (2346)

Concentration in Leadership 3+3 Pre-OT (LSHP) (230T)

Effective: Summer 2022

Revised 03.03.2022

UCC 02.28.2023

## Recommended Three-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
HCAM 230	US Healthcare Systems	3
Select one of the following: <sup>**</sup>		3
COMM 200	Civil Discourse: Theory & Practice	
POLS 235	Civil Discourse and Democracy	
PHIL 110	Ethics and Civil Discourse	

STAT 152	Elementary Statistics I	3
ENGL 102	Critical Writing <sup>**</sup>	3
ESAP 101	FYRST Seminar <sup>1</sup>	1
SUBJ 139	Foundations of Academic Discovery <sup>1 **</sup>	3
<b>Hours</b>		<b>16</b>

### Spring

HCAM 265	Managed Care & Insurance	3
PHYS 201	Elements of Physics I with Lab <sup>**</sup>	4
PSYC 105	Introduction to Psychology <sup>**</sup>	3
ENGL 104	Critical Reading	3
MIS 210	Productivity Software	3

**Hours** **16**

### Second Year

#### Fall

HCAM 305	Health Care Quality & Process Improvement	3
EXSC 250	Medical Terminology	3
BIOL 216	Anatomy and Physiology I with Lab <sup>**</sup>	3
PSYC 276 or PSYC 240	Introduction to Abnormal Psychology or Human Sexual Behavior	3
HCAM 275	Health Care Legal & Ethical Foundations	3
Declare a Thematic Thread <sup>2</sup>		

**Hours** **15**

#### Spring

HCAM 360	Healthcare Organizational Dynamics	3
Humanities Inquiry (p. 29) <sup>**</sup>		3
BIOL 217	Anatomy and Physiology II with Lab	3
HLTH 210 or HCAM 200	Introduction to Public Health or Introduction to Population Health	3
ACCT 209	Financial Accounting	3

**Hours** **15**

### Third Year

#### Fall

HCAM 430	Finance for Healthcare Organizations	3
HCAM 470	Healthcare Practice Management	3
Social Science Inquiry (p. 29) <sup>**</sup>		3
Rock Studies 2 Requirements (p. 29) <sup>**</sup>		3
INDP 202	Introduction to Anthropology	3
Creative & Aesthetic Inquiry (p. 29) <sup>**</sup>		3

**Hours** **18**

#### Spring

HCAM 400 or ACCT 400	Legal Environment of Healthcare or Legal Environment of Healthcare	3
HCAM 480	Healthcare Value-Based Reimbursement Systems	3
HCAM 499	Health Care Theory and Research Capstone Seminar	3
Thematic Thread Requirement (p. 29) <sup>4</sup>		3
Thematic Thread Requirement ECON 202 Principles of Microeconomics		3

**Hours** **15**

**Fourth Year****Fall**If not accepted in SRU OT Program <sup>3</sup>

HCAM 499	Health Care Theory and Research Capstone Seminar	3
HCAM 450	Internship-Health Care Administration & Management	3-12
MGMT 320	Operations Management	3
<b>Hours</b>		<b>9-18</b>

**Spring**If not accepted in SRU OT Program <sup>3</sup>

MGMT 354	Human Resources Management	3
HCAM Leadership Concentration Elective		3
Free Elective		3
<b>Hours</b>		<b>9</b>
<b>Total Hours**</b>		<b>113-122</b>

<sup>1</sup> Students are encouraged to take ESAP 101 as a Free Elective.<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.<sup>3</sup> **Senior Year- If not accepted into SRU OT Program:** If you choose to pursue Health Care Administration and Management 3+3 Pre-Occupational Therapy program and are not accepted into the graduate SRU Occupational Therapy program, then additional coursework is required, please refer to the Health Care Administration and Management, Leadership Concentration Curriculum Guide.<sup>4</sup> Suggest student take one of the following: HIST 364 OR PE 364 OR PE 342 OR PSYC 344<sup>\*</sup> Course offered in multiple subjects; cannot take course in first major subject.<sup>\*\*</sup> Rock Studies 2 Program

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

Major Code: 2346

Concentration Code: LSHP

2ND Major: 230T

Revised: 06.07.2022

## HCAM, Bachelor of Science (BS) - Concentration in Leadership / Pre-Occupational Therapy (SRU) (Traditional)

### HCAM PROGRAM LEARNING OUTCOMES

- **Business Technology and Analytics:** Students will articulate an applied understanding of key quality improvement metrics and methods to support evidence-based practice guidelines including:
  - Demonstrate knowledge, skills and abilities to plan for and ensure the security, integrity, and privacy of data and confidentiality of the end user.

- Demonstrate an ability to identify, aggregate, and summarize technical information for technical and non-technical personnel.

- **Communication and Relationship Management:** Students will demonstrate the ability to interact and communicate effectively by:
  - Presenting information in oral and written formats.
  - Collaborating effectively with others.

- **Financial Management and Economic Reasoning:** Students will demonstrate:
  - An ability to analyze, quantify, evaluate and determine the sound allocation of financial resources.
  - An ability to apply economic concepts for efficient allocation of scarce resources.

- **Healthcare Legal Environment and Ethics:** Students will be able to:

- Recognize will ethical dilemmas in healthcare.
- Recognize key healthcare legal and regulatory environment parameters.
- Demonstrate discern viable options for ethical guided decision-making processes.
- Demonstrate applied legal and regulatory reasoning.

- **Knowledge of the Healthcare Environment:** Students will demonstrate an accurate understanding of:

- Health care system structures.
- Reimbursement/payment models.
- Factors associated with population health.

- **Organizational Dynamics:** Students will articulate an applied understanding of:

- Organizational mission, vision, and culture.
- Behaviors associated with organizational commitment and job performance.

## What are your options?

**Pre-Occupational Therapy SRU 3+3:** Earn a Doctor of Occupational Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU OTD program. At the end of your second year, you apply for admission into the SRU OTD program. If accepted, your first year in the SRU OTD program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Occupational Therapy (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU OTD program and apply to the SRU OTD program in your senior year.

## Academic Policies for Students in the Health Care Administration and Management (HCAM) Major

*Effective for all Health Care Administration and Management (HCAM) Majors beginning Fall 2021*

1. Policy for earning acceptable grades in the HCAM program:
  - a. A student must earn a grade of "C" or better in ALL Required Basic Courses (HCAM 230, HCAM 265, HCAM 275) and Required

Upper-Level Courses (HCAM 305, HCAM 360, HCAM 400, HCAM 430, HCAM 450, HCAM 480, and HCAM 499).

- b. A student must earn a grade of "C" or better in ALL non-HCAM major Requirements (ACCT 209, ACCT 340, ECON 312, HLTH 210, and MIS 210, STAT 152 or ECON 219/MGMT 219).
  - c. The HCAM curriculum is structured with pre-requisites. A student must earn a "C" or better in the pre-requisite course to be able to take the next course. See course catalog for pre-requisites.
  - d. If a student does not earn a "C" or better, they will be required to:
    - i. Retake the course
    - ii. They will be dropped from any course(s) in the following semester that requires a "C" or better as a pre-requisite (see course catalog for pre-requisites)
    - iii. Students will need to meet with their Academic Advisor and change their schedule accordingly
2. SRU has a *Repeat of Courses Policy* as follows and it can be found in the course catalog: **Repeat of Courses < Slippery Rock University (sru.edu)**
- a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade. Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis. Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades. In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for post-baccalaureate students is the same as the undergraduate student policy.
3. Once the student has exceeded the *SRU Repeat of Courses Policy*, the student will have their major changed to Exploratory and HCAM Major courses will be removed from their schedule.
4. Additional costs associated with the HCAM major:
- a. Lab fees will be collected for classes with a lab component. This fee enhances the University's ability to offer a high-quality program.
  - b. A student in the HCAM major may be required to purchase Student Professional Liability Insurance while enrolled in HCAM 450 at their own cost. More information will be provided to students in the upper level HCAM courses.
  - c. HCAM 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

## RELATED LINKS

Healthcare Administration and Management - Pre-Occupational Therapy, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/health-care-administration-and-management-pre-occupational-therapy/>)

Healthcare Administration Department Page (<https://www.sru.edu/academics/colleges-and-departments/cohp/departments/health-care-administration-and-management/hcam-programs/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

#### 1st Major: HCAM

- Overall GPA: 2.0 or higher
- Major GPA (includes Major Requirements): 2.0 or higher

#### SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	60
	Electives	17

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

#### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Science Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15

**Thematic Thread**

Select 12 Credits (p. 29) <sup>2</sup>	12
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Required Thematic Thread Coursework:

ECON 202	Principles of Microeconomics
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<b>Total Hours</b>	<b>42</b>
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<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

**Basic Math Requirement**

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

**Computer Competency**

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

**DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT**

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

**MAJOR/CONCENTRATION REQUIREMENTS**

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Core Courses</b>		
HCAM 230	US Healthcare Systems <sup>1</sup>	3
HCAM 360	Healthcare Organizational Dynamics <sup>1</sup>	3
HCAM 450	Internship-Health Care Administration & Management <sup>1</sup>	3
HCAM 499	Health Care Theory and Research Capstone Seminar <sup>1</sup>	3

Subtotal	12
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**Leadership Core Courses**

HCAM 200 or HLTH 210	Introduction to Population Health <sup>1</sup> Introduction to Public Health	3
HCAM 275	Health Care Legal & Ethical Foundations <sup>1</sup>	3
HCAM 305	Health Care Quality & Process Improvement <sup>1</sup>	3
HCAM 400 or ACCT 400	Legal Environment of Healthcare <sup>1</sup> Legal Environment of Healthcare	3
HCAM 425	Long Term Care Management <sup>1</sup>	3
HCAM 470	Healthcare Practice Management <sup>1</sup>	3
MGMT 320	Operations Management <sup>1</sup>	3
MGMT 354	Human Resources Management <sup>1</sup>	3
MIS 210	Productivity Software <sup>1</sup>	3
MIS 310	Business Data Analysis and Visualization <sup>1</sup>	3
Subtotal		30

**Additional Required Coursework**

ACCT 209	Financial Accounting <sup>1</sup>	3
FIN 329	Principles of Insurance	3
HCAM 265	Managed Care & Insurance	3
HCAM 300	Healthcare Systems: Global Perspectives and Analysis	3
or ECON 312	Critical Choices in Health Care Policy	
HCAM 430	Finance for Healthcare Organizations <sup>1</sup>	3
HCAM 480	Healthcare Value-Based Reimbursement Systems <sup>1</sup>	3
Subtotal		18

<b>Total Hours</b>	<b>60</b>
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<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**ADDITIONAL OCCUPATIONAL THERAPY PREREQUISITE COURSES**

Code	Title	Hours
EXSC 250	Medical Terminology	3
INDP 202	Introduction to Anthropology	3
or INDP 106	Race and Ethnic Diversity in the USA	
or INDP 310	Cultural Area Studies	
or INDP 321	Minority Groups	
or SOWK 105	Human Diversity	
PHYS 201	Elements of Physics I with Lab	3-4
or PE 364	Biomechanics of Individuals with Disabilities	
PSYC 105	Introduction to Psychology	3
PSYC 240	Human Sexual Behavior	3
or PSYC 244	Developmental Psychology	
or PSYC 276	Introduction to Abnormal Psychology	

**CO-CURRICULAR AND EXPERIENTIAL LEARNING**

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student

success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership development
5. Service-learning classes
6. Career education and development
7. Internships
8. Volunteering in healthcare industry related settings
9. Job Shadowing

## Doctor of Occupational Therapy (OTD) Prerequisite Admission Requirements

### For Application Requirements

Please refer to Slippery Rock University's Occupational Therapy Studies (Master of Science in Occupational Therapy Studies) website for requirements: <http://www.sru.edu/OT> (<http://www.sru.edu/OT/>)

### Rock Studies 2

Code	Title	Hours
<b>Prerequisite Courses - SRU Occupational Therapy</b>		
BIOL 209		4
BIOL 309		4
EXSC 250 or HCAM 250	Medical Terminology Medical Terminology for Healthcare Administrators	3
PHYS 201 or PE 364	Elements of Physics I with Lab Biomechanics of Individuals with Disabilities	4
STAT 152	Elementary Statistics I	3
PSYC 105	Introduction to Psychology	3
PSYC 244	Developmental Psychology	3
PSYC 276	Introduction to Abnormal Psychology	3
Research Methods - Select One: <sup>1</sup>		3
EXSC 300	Research Methods in Exercise Science	
HCAM 499	Health Care Theory and Research Capstone Seminar	
INDP 318	Research Methods in Interdisciplinary Studies	
PSYC 231 & PSYC 232	Psychological Science I: Research Methods and Psychological Science II: Statistical Applications	
SOWK 318	Research Methods	
Anthropology or Sociology - Select One: <sup>1</sup>		3
INDP 106	Race and Ethnic Diversity in the USA	
INDP 202	Introduction to Anthropology	
INDP 211	Biological Anthropology	
INDP 309	Health and Society	
INDP 310	Cultural Area Studies	
INDP 321	Minority Groups	
INDP 324	The Family	
INDP 326	Society, Culture and Self	
INDP 339	Gender Roles and Society	
INDP 342	Sociology of Aging	

RCTH 120 Disability, Community Inclusion, and Diversity

SOWK 105 Human Diversity

**Total Hours**

**33**

<sup>1</sup> Select one course. See *My Rock Audit* for specific courses.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

HEALTH CARE ADMINISTRATION & MANAGEMENT - BS (2346)

Concentration in Leadership Traditional Pre-OT (LSHP)

Revised 11.01.2022

UCC 03.22.2022

## HCAM, Bachelor of Science (BS) - Concentration in Leadership / Pre- Physical Therapy (SRU) (3+3)

### HCAM Program Learning Outcomes

- **Business Technology and Analytics:** Students will articulate an applied understanding of key quality improvement metrics and methods to support evidence-based practice guidelines including:
  - Demonstrate knowledge, skills and abilities to plan for and ensure the security, integrity, and privacy of data and confidentiality of the end user.
  - Demonstrate an ability to identify, aggregate, and summarize technical information for technical and non-technical personnel.
- **Communication and Relationship Management:** Students will demonstrate the ability to interact and communicate effectively by:
  - Presenting information in oral and written formats.
  - Collaborating effectively with others.
- **Financial Management and Economic Reasoning:** Students will demonstrate:
  - An ability to analyze, quantify, evaluate and determine the sound allocation of financial resources.
  - An ability to apply economic concepts for efficient allocation of scarce resources.
- **Healthcare Legal Environment and Ethics:** Students will be able to:
  - Recognize will ethical dilemmas in healthcare.
  - Recognize key healthcare legal and regulatory environment parameters.
  - Demonstrate discern viable options for ethical guided decision-making processes.
  - Demonstrate applied legal and regulatory reasoning.



- **Knowledge of the Healthcare Environment:** Students will demonstrate an accurate understanding of:
  - Health care system structures.
  - Reimbursement/payment models.
  - Factors associated with population health.
- **Organizational Dynamics:** Students will articulate an applied understanding of:
  - Organizational mission, vision, and culture.
  - Behaviors associated with organizational commitment and job performance.

## What are your options?

**Pre-Physical Therapy SRU 3+3:** Earn a Doctor of Physical Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU DPT program. During your third undergraduate year, you apply for admission into the SRU DPT program. If accepted, your first year in the SRU DPT program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Physical Therapy (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU DPT program and apply to the SRU DPT program in your senior year.

## Academic Policies for Students in the Health Care Administration and Management (HCAM) Major

*Effective for students entering the major Fall 2017 and after*

1. Policy for achieving and maintaining "Sufficient Academic Performance"<sup>1</sup>
  - a. At the end of the semester in which a student has earned 40 credits (and every semester thereafter), the Major and Overall GPA will be reviewed:
    - i. A student must earn a 2.50 Major GPA to achieve "Sufficient Academic Performance" and continue in the HCAM major.
    - ii. A student earning below a 2.50 in the Major GPA at any time after earning 40 credits will be placed on a "one semester probation."<sup>2</sup> He/she must increase his/her GPA to 2.50 or higher by the end of the "one semester probation" or be **permanently** removed from the HCAM major. The student will be notified by email of his/her status following the "one semester probation." A student who has not achieved "Sufficient Academic Performance" will have his/her major changed to Exploratory.
    - iii. A student can be placed on a "one semester probation" a maximum of two times as an HCAM major. He/she will be **permanently** removed from the HCAM major if his/her Major GPA drops below a 2.50 a third time.
    - iv. A student on a "one semester probation" may not enroll in required 400 Level Courses unless he/she is repeating the course(s).
  - b. A transfer student who enters from another university or a Slippery Rock University student who changes his/her major to HCAM:

- i. With 40 or more earned credits will have a one-semester extension before his/her Major GPA are reviewed to determine if he/she has achieved "Sufficient Academic Performance".
  - ii. With less than 40 earned credits will follow Policy I. A above.
- c. An incoming FYRST student earning college credits prior to entering SRU may reach 40 credits before completing two semesters at SRU. In this case, the review to determine "Sufficient Academic Performance" will not begin until the student has completed two semesters as a student in the HCAM major.
2. Policy for earning acceptable grades in Required 400 Level Courses
  - a. A student must earn a grade of "C" or better in Required 400 Level Courses.
  - b. A student will not be permitted to begin an internship unless he/she has "Sufficient Academic Performance" and he/she has earned a grade of "C" or better in Required 400 Level Courses.
  - c. A student must also earn a grade of "C" or better in HCAM 305, HCAM 400, HCAM 410<sup>3</sup>, HCAM 430 and MIS 403 before he/she is allowed to take HCAM 499<sup>4</sup> and HCAM 450<sup>4</sup>.
3. Policy for changing to the HCAM major
  - a. A Slippery Rock University student wishing to change his/her major to Health Care Administration and Management must have an overall GPA of 2.00.
4. Additional costs associated with the HCAM major
  - a. A student in the HCAM major is required to maintain a current Student Professional Liability Insurance and meet any immunization or physical requirements set forth by an internship employer while enrolled in HCAM 450 at his/her own cost.

<sup>1</sup> "Sufficient Academic Performance" is defined as having a Major GPA of 2.50 or higher. The Major GPA is comprised of Required Basic Courses, Required 300 and 400 Level HCAM Courses. Please see My Rock Audit for specific courses.

<sup>2</sup> "One semester probation" is defined as the initial semester after which "Sufficient Academic Performance" was not achieved and the first occurring summer.

<sup>3</sup> If taken – HCAM 410 is an elective for non 3+2 PA or 3+3 PT majors

<sup>4</sup> If required – not required for 3+2 PA or 3+3 PT majors

## Related Links

Healthcare Administration and Management - Pre-Physical Therapy, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/health-care-administration-and-management-pre-physical-therapy/>)

Healthcare Administration Department Page (<https://www.sru.edu/academics/colleges-and-departments/cohp/departments/health-care-administration-and-management/hcam-programs/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

#### 1st Major: HCAM

- Overall GPA: 2.0 or higher
- Major GPA (includes Major Requirements): 2.0 or higher

#### 2nd Major: PT 3+3 HCAM

- Overall GPA: 3.00 or higher

## Summary\*

Code	Title	Hours
Rock Studies 2 Requirements		44
Other Basic Requirements		0-3
Computer Competency		0-3
Major Requirements		39
Electives		37

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the 1<sup>st</sup> year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Physical &amp; Natural Sciences Inquiry</i>		
PHYS 201	Elements of Physics I with Lab	4
BIOL 209	(Replaces biol 216)	4
Subtotal		17

### Thematic Thread

Select 12 Credits (p. 29) <sup>2</sup>		12
Required Thematic Thread Coursework:		
ECON 202	Principles of Microeconomics (Must be included as part of the 12 Thematic Thread credits)	
PSYC 105	Introduction to Psychology (Must be included as part of the 12 Thematic Thread credits)	
<b>Total Hours</b>		<b>44</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- If you choose to pursue Pre-Physical Therapy SRU 3+3 Health Care Administration and Management (HCAM) and are not accepted into the PT program, then the following additional HCAM courses are required to complete a first major of HCAM: HCAM Internship (HCAM 450) – **Plus** – courses necessary to satisfy the Leadership Concentration. Please refer to the HCAM curriculum guide.

Code	Title	Hours
<b>Required Basic Courses</b>		
ACCT 209	Financial Accounting <sup>1</sup>	3
HCAM 200	Introduction to Population Health	3
	or HLTH 210 Introduction to Public Health	
HCAM 230	US Healthcare Systems <sup>1</sup>	3
HCAM 275	Health Care Legal & Ethical Foundations <sup>1,2</sup>	3
MIS 210	Productivity Software <sup>1</sup>	3
STAT 152	Elementary Statistics I <sup>1</sup>	3
Subtotal		18

**Required Upper Level Courses (21 credits if accepted to SRU DPT Program) <sup>2</sup>**

Must have achieved "Sufficient Academic Performance" to take these courses. Must earn a "C" or better in all of the following ACCT, HCAM, MIS and PHIL courses:

HCAM 265	Managed Care & Insurance	3
HCAM 305	Health Care Quality & Process Improvement	3
HCAM 360	Healthcare Organizational Dynamics <sup>1,3</sup>	3
HCAM 400 or ACCT 400	Legal Environment of Healthcare <sup>1,3</sup>	3
HCAM 430	Finance for Healthcare Organizations <sup>1,3</sup>	3
HCAM 470	Healthcare Practice Management	3
HCAM 480	Healthcare Value-Based Reimbursement Systems	3
Subtotal		21

**Total Hours** **39**

<sup>1</sup> Course counts for 50% of Major and Major GPA

<sup>2</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

<sup>3</sup> See advisor for 600-level course options.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## ADDITIONAL PHYSICAL THERAPY PREREQUISITE COURSES

Code	Title	Hours
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
BIOL 309		4
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
PHYS 202	Elements of Physics II/ Lab	4
PSYC 240	Human Sexual Behavior	3

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. These opportunities can deepen and enhance the learning in accounting, economics and finance. In addition, there is a strong correlation between long-term student success and engagement in these opportunities:

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership development
5. Service-learning classes
6. Career education and development
7. Internships
8. Volunteering in healthcare industry related settings
9. Job Shadowing

## Doctor of Physical Therapy (DPT) Prerequisite Admission Requirements – Pre-Physical Therapy SRU 3+3

### For Application Requirements

Please refer to Slippery Rock University's Physical Therapy (Doctor of Physical Therapy) website for requirements: [www.sru.edu/PT](http://www.sru.edu/PT) (<http://www.sru.edu/PT/>).

### Rock Studies 2

Code	Title	Hours
<b>Prerequisite Courses - SRU Physical Therapy</b>		

Select one of the following: 6-8

BIOL 209 & BIOL 309	and	
BIOL 340 & BIOL 410	Vertebrate Anatomy with Lab and Animal Physiology with Lab	

CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
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CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
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Select one of the following: 8

PHYS 201 & PHYS 202	Elements of Physics I with Lab and Elements of Physics II/ Lab	
PHYS 216 & PHYS 217	University Physics 1 with Lab and University Physics 2 with Lab	

STAT 152 or BIOL 325	Elementary Statistics I Biometry with Lab	3
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PSYC 105	Introduction to Psychology	3
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Additional Psychology Course <sup>1</sup>		3
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**Total Hours** **31-33**

<sup>1</sup> See My Rock Audit for specific courses.

### Requirements for Pre-Physical Therapy SRU 3+3

If any of these requirements are not met, the 3+3 designation will be removed from the student's record:

1. A 3.0 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Physical Therapy SRU 3+3 program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

### Provision

Should a Pre-Physical Therapy SRU 3+3 student be unsuccessful in completing the 1st two semesters (fall or spring) of the Doctor of Physical Therapy Program and wants to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, Physical Therapy courses will count toward the completion of his/her undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the Doctor of Physical Therapy Program with an earned Bachelor's degree.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum

categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

HEALTH CARE ADMINISTRATION & MANAGEMENT - BS (2346)

Concentration in Leadership 3+3 Pre-PT (LSHP) (23PT)

Effective: Summer 2022

Revised 06.09.2022

UCC 03.22.2022

## Recommended Three-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
HCAM 230	US Healthcare Systems	3
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab **	4
MIS 210	Productivity Software	3
ENGL 102	Critical Writing **	3
ESAP 101	FYRST Seminar <sup>1</sup>	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup> **	3
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
HCAM 265	Managed Care & Insurance	3
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
Creative & Aesthetic Inquiry (p. 29) **		3
ENGL 104	Critical Reading **	3
COMM 200	Civil Discourse: Theory & Practice **	3
CPSC 100	Introduction to Computing for Liberal Arts	1
<b>Hours</b>		<b>17</b>
<b>Second Year</b>		
<b>Fall</b>		
HCAM 275	Health Care Legal & Ethical Foundations	3
HCAM 305	Health Care Quality & Process Improvement	3
BIOL 216	Anatomy and Physiology I with Lab **	3
PSYC 105	Introduction to Psychology **	3
Humanities Inquiry (p. 29) **		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
HCAM 360	Healthcare Organizational Dynamics	3
HLTH 210 or HCAM 200	Introduction to Public Health or Introduction to Population Health	3
BIOL 217	Anatomy and Physiology II with Lab	3
ACCT 209	Financial Accounting	3
STAT 152	Elementary Statistics I **	3
<b>Hours</b>		<b>15</b>

### Third Year

#### Fall

HCAM 430	Finance for Healthcare Organizations	3
HCAM 470	Healthcare Practice Management	3
Social Science Inquiry (p. 29) **		3
PHYS 201	Elements of Physics I with Lab	4
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement ECON 202 Principles of Microeconomics		3
**Additional fees will apply if student takes over 18 credits.		

**Hours 19**

#### Spring

HCAM 400 or ACCT 400	Legal Environment of Healthcare or Legal Environment of Healthcare	3
HCAM 480	Healthcare Value-Based Reimbursement Systems	3
PHYS 202	Elements of Physics II/ Lab	4
PSYC 240 or PSYC 244	Human Sexual Behavior or Developmental Psychology	3
Thematic Thread Requirement (p. 29) <sup>4</sup>		3

**Hours 16**

### Fourth Year

#### Fall

If not accepted in SRU PT Program		
HCAM 499	Health Care Theory and Research Capstone Seminar	3
HCAM 450	Internship-Health Care Administration & Management	3-12
MGMT 320	Operations Management	3

**Hours 9-18**

#### Spring

If not accepted in SRU PT Program		
MGMT 354	Human Resources Management	3
HCAM Leadership Concentration Elective		3
Free Elective (Recommended HCAM or in Minor)		3

**Hours 9**

**Total Hours\*\* 117-126**

<sup>1</sup> Students are encouraged to take ESAP 101 as a Free Elective.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>3</sup> **Senior Year- If not accepted into SRU PT Program:** If you choose to pursue Health Care Administration and Management 3+3 Pre-Physical Therapy program and are not accepted into the graduate SRU Physical Therapy program, then additional coursework is required, please refer to the Health Care Administration and Management, Leadership Concentration Curriculum Guide.

<sup>4</sup> Students are recommended to take HIST 364 OR PE 364 OR PE 342 OR PSYC 334

\* Course offered in multiple subjects; cannot take course in first major subject.

\*\* Rock Studies 2 Program

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing

*courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

Major Code: 2346

Concentration Code: LSHP

2ND Major: 23PT

Revised: 06.07.2022

## HCAM, Bachelor of Science (BS) - Concentration in Leadership / Pre-Physical Therapy (SRU) (Traditional)

### HCAM Program Learning Outcomes

- **Business Technology and Analytics:** Students will articulate an applied understanding of key quality improvement metrics and methods to support evidence-based practice guidelines including:
  - Demonstrate knowledge, skills and abilities to plan for and ensure the security, integrity, and privacy of data and confidentiality of the end user.
  - Demonstrate an ability to identify, aggregate, and summarize technical information for technical and non-technical personnel.
- **Communication and Relationship Management:** Students will demonstrate the ability to interact and communicate effectively by:
  - Presenting information in oral and written formats.
  - Collaborating effectively with others.
- **Financial Management and Economic Reasoning:** Students will demonstrate:
  - An ability to analyze, quantify, evaluate and determine the sound allocation of financial resources.
  - An ability to apply economic concepts for efficient allocation of scarce resources.
- **Healthcare Legal Environment and Ethics:** Students will be able to:
  - Recognize will ethical dilemmas in healthcare.
  - Recognize key healthcare legal and regulatory environment parameters.
  - Demonstrate discern viable options for ethical guided decision-making processes.
  - Demonstrate applied legal and regulatory reasoning.
- **Knowledge of the Healthcare Environment:** Students will demonstrate an accurate understanding of:
  - Health care system structures.
  - Reimbursement/payment models.
  - Factors associated with population health.
- **Organizational Dynamics:** Students will articulate an applied understanding of:
  - Organizational mission, vision, and culture.
  - Behaviors associated with organizational commitment and job performance.

### What are your options?

**Pre-Physical Therapy SRU 3+3:** Earn a Doctor of Physical Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU DPT program. During your

third undergraduate year, you apply for admission into the SRU DPT program. If accepted, your first year in the SRU DPT program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Physical Therapy (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU DPT program and apply to the SRU DPT program in your senior year.

## Academic Policies for Students in the Health Care Administration and Management (HCAM) Major

*Effective for all Health Care Administration and Management (HCAM) Majors beginning Fall 2021*

1. Policy for earning acceptable grades in the HCAM program:
  - a. A student must earn a grade of "C" or better in ALL Required Basic Courses (HCAM 230, HCAM 265, HCAM 275) and Required Upper-Level Courses (HCAM 305, HCAM 360, HCAM 400, HCAM 430, HCAM 450, HCAM 480, and HCAM 499).
  - b. A student must earn a grade of "C" or better in ALL non-HCAM major Requirements (ACCT 209, ACCT 340, ECON 312, HLTH 210, and MIS 210, STAT 152 or ECON 219/MGMT 219).
  - c. The HCAM curriculum is structured with pre-requisites. A student must earn a "C" or better in the pre-requisite course to be able to take the next course. See course catalog for pre-requisites.
  - d. If a student does not earn a "C" or better, they will be required to:
    - i. Retake the course
    - ii. They will be dropped from any course(s) in the following semester that requires a "C" or better as a pre-requisite (see course catalog for pre-requisites)
    - iii. Students will need to meet with their Academic Advisor and change their schedule accordingly
2. SRU has a *Repeat of Courses Policy* as follows and it can be found in the course catalog: **Repeat of Courses < Slippery Rock University (sru.edu)**
  - a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade. Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis. Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades. In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for post-baccalaureate students is the same as the undergraduate student policy.



3. Once the student has exceeded the *SRU Repeat of Courses Policy*, the student will have their major changed to Exploratory and HCAM Major courses will be removed from their schedule.
4. Additional costs associated with the HCAM major:
  - a. Lab fees will be collected for classes with a lab component. This fee enhances the University's ability to offer a high-quality program.
  - b. A student in the HCAM major may be required to purchase Student Professional Liability Insurance while enrolled in HCAM 450 at their own cost. More information will be provided to students in the upper level HCAM courses.
  - c. HCAM 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

## Related Links

Healthcare Administration and Management - Pre-Physical Therapy, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/health-care-administration-and-management-pre-physical-therapy/>)

Healthcare Administration Department Page (<https://www.sru.edu/academics/colleges-and-departments/cohp/departments/health-care-administration-and-management/hcam-programs/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

- Overall GPA: 2.0 or higher
- Major GPA (includes Major Requirements): 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	60
	Electives	17

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	

PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Science Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
ECON 202	Principles of Microeconomics	
<b>Total Hours</b>		<b>42</b>

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.
- <sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Core Courses</b>		
HCAM 230	US Healthcare Systems <sup>1</sup>	3
HCAM 360	Healthcare Organizational Dynamics <sup>1</sup>	3
HCAM 450	Internship-Health Care Administration & Management <sup>1</sup>	3
HCAM 499	Health Care Theory and Research Capstone Seminar <sup>1</sup>	3
Subtotal		12
<i>Leadership Core Courses</i>		
HCAM 275	Health Care Legal & Ethical Foundations <sup>1</sup>	3
HCAM 305	Health Care Quality & Process Improvement <sup>1</sup>	3
HCAM 400 or ACCT 400	Legal Environment of Healthcare <sup>1</sup>	3
HCAM 425	Long Term Care Management <sup>1</sup>	3
HCAM 470	Healthcare Practice Management <sup>1</sup>	3
HLTH 210 or HCAM 200	Introduction to Public Health <sup>1</sup>	3
MGMT 320	Operations Management <sup>1</sup>	3
MGMT 354	Human Resources Management <sup>1</sup>	3
MIS 210	Productivity Software <sup>1</sup>	3
MIS 310	Business Data Analysis and Visualization <sup>1</sup>	3
<b>Additional Required Coursework:</b>		
ACCT 209	Financial Accounting <sup>1</sup>	3
FIN 329	Principles of Insurance <sup>1</sup>	3
HCAM 265	Managed Care & Insurance <sup>1</sup>	3
HCAM 430	Finance for Healthcare Organizations <sup>1</sup>	3
HCAM 480	Healthcare Value-Based Reimbursement Systems <sup>1</sup>	3
HCAM 300 or ECON 312	Healthcare Systems: Global Perspectives and Analysis <sup>1</sup>	3
Subtotal		48
<b>Total Hours</b>		<b>60</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Additional Physical Therapy Prerequisite Courses

Code	Title	Hours
BIOL 217	Anatomy and Physiology II with Lab	3
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
EXSC 250	Medical Terminology	3
PHYS 202	Elements of Physics II/ Lab	4
PSYC 240 or PSYC 244	Human Sexual Behavior Developmental Psychology	3

## Co-Curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership development
5. Service-learning classes
6. Career education and development
7. Internships
8. Volunteering in healthcare industry related settings
9. Job Shadowing

## Doctor of Physical Therapy (DPT) Prerequisite Admission Requirements

### For Application Requirements

Please refer to Slippery Rock University's Physical Therapy (Doctor of Physical Therapy) website for requirements: [www.sru.edu/PT/](http://www.sru.edu/PT/) (<http://www.sru.edu/PT/>)

### Rock Studies 2

Code	Title	Hours
<b>Prerequisite Courses - SRU Physical Therapy</b>		
Select one of the following:		6-8
BIOL 209 & BIOL 309	and	
BIOL 340 & BIOL 410	Vertebrate Anatomy with Lab and Animal Physiology with Lab	
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
Select one of the following:		8
PHYS 201 & PHYS 202	Elements of Physics I with Lab and Elements of Physics II/ Lab	
PHYS 211 & PHYS 213	General Physics I with Lab and General Physics III/ Lab	
STAT 152 or BIOL 325	Elementary Statistics I Biometry with Lab	3
PSYC 105	Introduction to Psychology	3
Additional Psychology Course <sup>1</sup>		3
<b>Total Hours</b>		<b>31-33</b>

<sup>1</sup> See My Rock Audit for specific courses.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

HEALTH CARE ADMINISTRATION & MANAGEMENT - BS (2346)

Concentration in Leadership Traditional Pre-PT SRU

Revised 11.01.2022

UCC 02.15.2022

## HCAM, Bachelor of Science (BS) - Concentration in Leadership / Pre-Physician Assistant (SRU) (3+2)

- **Business Technology and Analytics:** Students will articulate an applied understanding of key quality improvement metrics and methods to support evidence-based practice guidelines including:
  - Demonstrate knowledge, skills and abilities to plan for and ensure the security, integrity, and privacy of data and confidentiality of the end user.
  - Demonstrate an ability to identify, aggregate, and summarize technical information for technical and non-technical personnel.
- (UG 02, UG 10)
- **Communication and Relationship Management:** Students will demonstrate the ability to interact and communicate effectively by:
  - Presenting information in oral and written formats.
  - Collaborating effectively with others.
- (UG 01, UG 05, UG 08, UG 09)
- **Financial Management and Economic Reasoning:** Students will demonstrate:
  - An ability to analyze, quantify, evaluate and determine the sound allocation of financial resources.
  - An ability to apply economic concepts for efficient allocation of scarce resources.
- (UG 02, UG 04)
- **Healthcare Legal Environment and Ethics:** Students will be able to:
  - Recognize will ethical dilemmas in healthcare.
  - Recognize key healthcare legal and regulatory environment parameters.
  - Demonstrate discern viable options for ethical guided decision-making processes.
  - Demonstrate applied legal and regulatory reasoning.
- (UG 02, UG 05, UG 07, UG 08, UG 09)
- **Knowledge of the Healthcare Environment:** Students will demonstrate an accurate understanding of:
  - Health care system structures.
  - Reimbursement/payment models.

- Factors associated with population health.

- (UG 02, UG 09)

- **Organizational Dynamics:** Students will articulate an applied understanding of:

- Organizational mission, vision, and culture.
- Behaviors associated with organizational commitment and job performance.

- (UG 05, UG 07, UG 08, UG 09)

## What are your options?

**Pre-Physician Assistant SRU 3+2:** Earn a Master of Science degree in Physician Assistant Studies in five years rather than six. In the first three years, you complete your major courses and pre-requisites for the SRU PA program. At the end of your second year, you apply for admission into the SRU PA program. If accepted, your first year in the SRU PA program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Physician Assistant (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU PA program and apply to the SRU PA program in your senior year.

## Academic Policies for Students in the Health Care Administration and Management (HCAM) Major

*Effective for students entering the major Fall 2017 and after*

1. Policy for achieving and maintaining "Sufficient Academic Performance"<sup>1</sup>
  - a. At the end of the semester in which a student has earned 40 credits (and every semester thereafter), the Major and Overall GPA will be reviewed:
    - i. A student must earn a 2.50 Major GPA to achieve "Sufficient Academic Performance" and continue in the HCAM major.
    - ii. A student earning below a 2.50 in the Major GPA at any time after earning 40 credits will be placed on a "one semester probation."<sup>2</sup> He/she must increase his/her GPA to 2.50 or higher by the end of the "one semester probation" or be **permanently** removed from the HCAM major. The student will be notified by email of his/her status following the "one semester probation." A student who has not achieved "Sufficient Academic Performance" will have his/her major changed to Exploratory.
    - iii. A student can be placed on a "one semester probation" a maximum of two times as an HCAM major. He/she will be **permanently** removed from the HCAM major if his/her Major GPA drops below a 2.50 a third time.
    - iv. A student on a "one semester probation" may not enroll in required 400 Level Courses unless he/she is repeating the course(s).
  - b. A transfer student who enters from another university or a Slippery Rock University student who changes his/her major to HCAM:

- i. With 40 or more earned credits will have a one-semester extension before his/her Major GPA are reviewed to determine if he/she has achieved "Sufficient Academic Performance".
  - ii. With less than 40 earned credits will follow Policy I. A above.
- c. An incoming FYRST student earning college credits prior to entering SRU may reach 40 credits before completing two semesters at SRU. In this case, the review to determine "Sufficient Academic Performance" will not begin until the student has completed two semesters as a student in the HCAM major.
2. Policy for earning acceptable grades in Required 400 Level Courses
  - a. A student must earn a grade of "C" or better in Required 400 Level Courses.
  - b. A student will not be permitted to begin an internship unless he/she has "Sufficient Academic Performance" and he/she has earned a grade of "C" or better in Required 400 Level Courses.
  - c. A student must also earn a grade of "C" or better in HCAM 305, HCAM 400, HCAM 410<sup>3</sup>, HCAM 430 and MIS 403 before he/she is allowed to take HCAM 499<sup>4</sup> and HCAM 450<sup>4</sup>.
3. Policy for changing to the HCAM major
  - a. A Slippery Rock University student wishing to change his/her major to Health Care Administration and Management must have an overall GPA of 2.00.
4. Additional costs associated with the HCAM major
  - a. A student in the HCAM major is required to maintain a current Student Professional Liability Insurance and meet any immunization or physical requirements set forth by an internship employer while enrolled in HCAM 450 at his/her own cost.

<sup>1</sup> "Sufficient Academic Performance" is defined as having a Major GPA of 2.50 or higher. The Major GPA is comprised of Required Basic Courses, Required 300 and 400 Level HCAM Courses. Please see My Rock Audit for specific courses.

<sup>2</sup> "One semester probation" is defined as the initial semester after which "Sufficient Academic Performance" was not achieved and the first occurring summer.

<sup>3</sup> If taken – HCAM 410 is an elective for non 3+2 PA or 3+3 PT majors

<sup>4</sup> If required – not required for 3+2 PA or 3+3 PT majors

## Related Links

Healthcare Administration and Management - Pre-Physician Assistant, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/health-care-administration-and-management-pre-physician-assistant/>)

Healthcare Administration Department Page (<https://www.sru.edu/academics/colleges-and-departments/cohp/departments/health-care-administration-and-management/hcam-programs/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

#### 1<sup>st</sup> Major: HCAM

- Overall GPA: 2.0 or higher
- Major GPA (includes Major Requirements): 2.0 or higher

#### 2<sup>nd</sup> Major: Pre-PA SRU 3+2 HCAM

- Overall GPA: 3.25 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	44
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	36
	Electives	40

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the 1<sup>st</sup> year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

#### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Physical &amp; Natural Sciences Inquiry</i>		
BIOL 209		4
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
Subtotal		17

#### Thematic Thread

Select 12 Credits (p. 29) <sup>2</sup>		12
Required Thematic Thread Coursework:		
ECON 202	Principles of Microeconomics (Must be included as part of the 12 Thematic Thread credits)	
PSYC 105	Introduction to Psychology (Must be included as part of the 12 Thematic Thread credits)	

<b>Total Hours</b>	<b>44</b>
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<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

- <sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- If you choose to pursue Pre-Physician Assistant (PA) SRU 3+2 Health Care Administration and Management and are not accepted into the PA program, then the following additional HCAM courses are required to complete a first major of Health Care Administration and Management (HCAM). You will be required to successfully complete the HCAM capstone course (HCAM 499), HCAM internship (HCAM 450) - **Plus** - courses necessary to satisfy the Leadership concentration. Please see the HCAM curriculum guide.

Code	Title	Hours
<b>Required Basic Courses</b>		
ACCT 209	Financial Accounting <sup>1</sup>	3
HCAM 200	Introduction to Population Health <sup>1</sup>	3
	or HLTH 210 Introduction to Public Health	
HCAM 230	US Healthcare Systems <sup>1</sup>	3
HCAM 275	Health Care Legal & Ethical Foundations <sup>1,2</sup>	3
MIS 210	Productivity Software <sup>1</sup>	3
<b>Subtotal</b>		<b>15</b>

## Required Upper Level Courses (21 credits if accepted to SRU PA Program)

Must have achieved "Sufficient Academic Performance" to take these courses. Must earn a "C" or better in all of the following ACCT, HCAM, MIS and PHIL courses:

HCAM 265	Managed Care & Insurance	3
HCAM 305	Health Care Quality & Process Improvement <sup>1,3</sup>	3
HCAM 360	Healthcare Organizational Dynamics <sup>1,3</sup>	3
HCAM 400	Legal Environment of Healthcare <sup>1,3</sup>	3
	or ACCT 400 Legal Environment of Healthcare	
HCAM 430	Finance for Healthcare Organizations <sup>1,3</sup>	3
HCAM 470	Healthcare Practice Management	3
HCAM 480	Healthcare Value-Based Reimbursement Systems <sup>1</sup>	3
<b>Subtotal</b>		<b>21</b>
<b>Total Hours</b>		<b>36</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA.

<sup>2</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

<sup>3</sup> See adviser for 600 level course options.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Additional Physician Assistant Prerequisite Courses

Code	Title	Hours
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 309		4
BIOL 210	Medical Microbiology with Lab	3
	or BIOL 330 Microbiology/Lab	
BIOL 250	Genetics with Lab	4
CHEM 201	Organic Chemistry I	3
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
EXSC 250	Medical Terminology	3
	or HCAM 250 Medical Terminology for Healthcare Administrators	
<b>Total Hours</b>		<b>25</b>

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership development
5. Service-learning classes
6. Career education and development
7. Internships



8. Volunteering in healthcare industry related settings
9. Job Shadowing

## Physician Assistant Studies (Master of Science in Physician Assistant Studies)

### Prerequisite Admission Requirements – Pre- Physician Assistant 3+2

#### For Application Requirements

Please refer to Slippery Rock University's Physician Assistant Studies (Master of Science in Physician Assistant Studies) website for requirements: <http://www.sru.edu/pa> (<http://www.sru.edu/pa/>)

#### Rock Studies 2

Code	Title	Hours
<b>Prerequisite Courses - SRU Physician Assistant</b>		
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 210 or BIOL 330	Medical Microbiology with Lab Microbiology/Lab	3
BIOL 209		4
BIOL 309		4
BIOL 250	Genetics with Lab	4
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
CHEM 201	Organic Chemistry I	3
EXSC 250 or HCAM 250	Medical Terminology Medical Terminology for Healthcare Administrators	3
PSYC 105	Introduction to Psychology	3
Inferential Statistics Course <sup>1</sup>		3
<b>Total Hours</b>		<b>39</b>

<sup>1</sup> Any statistics course with inferential statistics embedded. See My Rock Audit for specific courses.

#### Pre-Physician Assistant SRU 3+2 Requirements

If any of these requirements are not met, the 3+2 designation will be removed from the student's record:

1. A 3.25 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Physician Assistant SRU 3+2 program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

#### Provision

Should a Pre-Physician Assistant SRU 3+2 student be unsuccessful in completing the 1<sup>st</sup> two semesters (summer or fall) of the Physician Assistant Program and wants to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, Physician Assistant courses will count toward the completion of his/her undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the Physician Assistant Studies Program with an earned Bachelor's degree.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

HEALTH CARE ADMINISTRATION & MANAGEMENT - BS (2346)

Concentration in Leadership 3+2 Pre-PA (LHSP) (23PA)

Effective: Summer 2022

Revised 03.03.2023

UCC 08.28.2023

## Recommended Three-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
HCAM 230	US Healthcare Systems	3
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab **	4
MIS 210	Productivity Software	3
ENGL 102	Critical Writing **	3
ESAP 101	FYRST Seminar <sup>1</sup>	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup> **	3
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
HCAM 265	Managed Care & Insurance	3
CHEM 108 or CHEM 112	General Chemistry II or General Chemistry II Lab	1-3
EXSC 250	Medical Terminology	3
ENGL 104	Critical Reading **	3
COMM 200	Civil Discourse: Theory & Practice **	3
<b>Hours</b>		<b>13-15</b>
<b>Second Year</b>		
<b>Fall</b>		
HCAM 275	Health Care Legal & Ethical Foundations	3
HCAM 305	Health Care Quality & Process Improvement	3
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 216	Anatomy and Physiology I with Lab **	3
PSYC 105	Introduction to Psychology **	3
CPSC 100	Introduction to Computing for Liberal Arts	1
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
HCAM 360	Healthcare Organizational Dynamics	3
ACCT 209	Financial Accounting	3
HLTH 210 or HCAM 200	Introduction to Public Health or Introduction to Population Health	3

BIOL 217	Anatomy and Physiology II with Lab	3
BIOL 250	Genetics with Lab	4
STAT 152	Elementary Statistics I **	3
**Additional fees will apply if student takes over 18 credits.		

**Hours** **19**

### Third Year

#### Fall

HCAM 470	Healthcare Practice Management	3
HCAM 430	Finance for Healthcare Organizations	3
Social Science Inquiry (p. 29)		3
CHEM 201	Organic Chemistry I	3
Thematic Thread Requirement ECON 202 Principles of Microeconomics		3
Thematic Thread Requirement (p. 29) **		3

**Hours** **18**

#### Spring

HCAM 400 or ACCT 400	Legal Environment of Healthcare or Legal Environment of Healthcare	3
HCAM 480	Healthcare Value-Based Reimbursement Systems	3
BIOL 210/330	Medical Microbiology with Lab	3
Creative & Aesthetic Inquiry (p. 29) **		3
Humanities Inquiry (p. 29) **		3
Thematic Thread Requirement (p. 29) <sup>4</sup>		3

**Hours** **18**

### Fourth Year

#### Fall

Senior Year: If not accepted into SRU PA <sup>3</sup>		
HCAM 499	Health Care Theory and Research Capstone Seminar	3
HCAM 450	Internship-Health Care Administration & Management	3-12
MGMT 320	Operations Management	3

**Hours** **9-18**

#### Spring

Senior Year: If not accepted into SRU PA <sup>3</sup>		
MGMT 354	Human Resources Management	3
HCAM Leadership Concentration Elective		3
Free Elective (Recommended HCAM or in Minor)		3

**Hours** **9**

**Total Hours\*\*** **120-131**

\* Course offered in multiple subjects; cannot take course in first major subject.

<sup>1</sup> Students are encouraged to take ESAP 101 as a Free Elective.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>3</sup> **Senior Year- If not accepted into SRU PA Program:** If you choose to pursue Health Care Administration and Management 3+2 Pre-Physician Assistant program and are not accepted into the graduate SRU Physician Assistant program, then additional coursework is required, please refer to the Health Care Administration and Management, Leadership Concentration Curriculum Guide.

<sup>4</sup> Suggest student take one of the following: HIST 364 OR PE 365 OR PE 342 OR PSYC 344

\*\* Rock Studies 2 Program

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

MAJOR CODE: 2346 (LSHP/23PA)

Revised 06.07.2022

## HCAM, Bachelor of Science (BS) - Concentration in Leadership / Pre-Physician Assistant (SRU) (Traditional)

### HCAM Program Learning Outcomes

- **Business Technology and Analytics:** Students will articulate an applied understanding of key quality improvement metrics and methods to support evidence-based practice guidelines including:
  - Demonstrate knowledge, skills and abilities to plan for and ensure the security, integrity, and privacy of data and confidentiality of the end user.
  - Demonstrate an ability to identify, aggregate, and summarize technical information for technical and non-technical personnel.
- **Communication and Relationship Management:** Students will demonstrate the ability to interact and communicate effectively by:
  - Presenting information in oral and written formats.
  - Collaborating effectively with others.
- **Financial Management and Economic Reasoning:** Students will demonstrate:
  - An ability to analyze, quantify, evaluate and determine the sound allocation of financial resources.
  - An ability to apply economic concepts for efficient allocation of scarce resources.
- **Healthcare Legal Environment and Ethics:** Students will be able to:
  - Recognize will ethical dilemmas in healthcare.
  - Recognize key healthcare legal and regulatory environment parameters.
  - Demonstrate discern viable options for ethical guided decision-making processes.
  - Demonstrate applied legal and regulatory reasoning.
- **Knowledge of the Healthcare Environment:** Students will demonstrate an accurate understanding of:
  - Health care system structures.
  - Reimbursement/payment models.
  - Factors associated with population health.
- **Organizational Dynamics:** Students will articulate an applied understanding of:

- Organizational mission, vision, and culture.
- Behaviors associated with organizational commitment and job performance.

## What are your options?

**Pre-Physician Assistant SRU 3+2:** Earn a Master of Science degree in Physician Assistant Studies in five years rather than six. In the first three years, you complete your major courses and pre-requisites for the SRU PA program. At the end of your second year, you apply for admission into the SRU PA program. If accepted, your first year in the SRU PA program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Physician Assistant (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU PA program and apply to the SRU PA program in your senior year.

## Academic Policies for Students in the Health Care Administration and Management (HCAM) Major

*Effective for all Health Care Administration and Management (HCAM) Majors beginning Fall 2021*

- Policy for earning acceptable grades in the HCAM program:
  - A student must earn a grade of "C" or better in ALL Required Basic Courses (HCAM 230, HCAM 265, HCAM 275) and Required Upper-Level Courses (HCAM 305, HCAM 360, HCAM 400, HCAM 430, HCAM 450, HCAM 480, and HCAM 499).
  - A student must earn a grade of "C" or better in ALL non-HCAM major Requirements (ACCT 209, ACCT 340, ECON 312, HLTH 210, and MIS 210, STAT 152 or ECON 219/MGMT 219).
  - The HCAM curriculum is structured with pre-requisites. A student must earn a "C" or better in the pre-requisite course to be able to take the next course. See course catalog for pre-requisites.
  - If a student does not earn a "C" or better, they will be required to:
    - Retake the course
    - They will be dropped from any course(s) in the following semester that requires a "C" or better as a pre-requisite (see course catalog for pre-requisites)
    - Students will need to meet with their Academic Advisor and change their schedule accordingly
- SRU has a *Repeat of Courses Policy* as follows and it can be found in the course catalog: **Repeat of Courses < Slippery Rock University (sru.edu)**
  - Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade. Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit

by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis. Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades. In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for post-baccalaureate students is the same as the undergraduate student policy.

- Once the student has exceeded the *SRU Repeat of Courses Policy*, the student will have their major changed to Exploratory and HCAM Major courses will be removed from their schedule.
- Additional costs associated with the HCAM major:
  - Lab fees will be collected for classes with a lab component. This fee enhances the University's ability to offer a high-quality program.
  - A student in the HCAM major may be required to purchase Student Professional Liability Insurance while enrolled in HCAM 450 at their own cost. More information will be provided to students in the upper level HCAM courses.
  - HCAM 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

## Related Links

Healthcare Administration and Management - Pre-Physician Assistant, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/health-care-administration-and-management-pre-physician-assistant/>)

Healthcare Administration Department Page (<https://www.sru.edu/academics/colleges-and-departments/cohp/departments/health-care-administration-and-management/hcam-programs/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

#### 1st Major: HCAM

- Overall GPA: 2.0 or higher
- Major GPA (includes Major Requirements): 2.0 or higher

#### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	51
	Electives	26

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
ECON 202	Principles of Microeconomics	
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		

CPSC 100	Introduction to Computing for Liberal Arts
CPSC 110	Computer Concepts
CPSC 130	Introduction to Computing and Programming
PE 202	Technology for Wellness
<hr/>	
<b>Total Hours</b>	<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Core Courses</b>		
HCAM 230	US Healthcare Systems <sup>1</sup>	3
HCAM 360	Healthcare Organizational Dynamics <sup>1</sup>	3
HCAM 450	Internship-Health Care Administration & Management <sup>1</sup>	3
HCAM 499	Health Care Theory and Research Capstone Seminar <sup>1</sup>	3
Subtotal		12
<b>Leadership Core Courses</b>		
HCAM 275	Health Care Legal & Ethical Foundations <sup>1</sup>	3
HCAM 305	Health Care Quality & Process Improvement <sup>1</sup>	3
HCAM 400 or ACCT 400	Legal Environment of Healthcare <sup>1</sup>	3
HCAM 425	Long Term Care Management <sup>1</sup>	3
HCAM 470	Healthcare Practice Management <sup>1</sup>	3
HLTH 210 or HCAM 200	Introduction to Public Health <sup>1</sup>	3
MGMT 320	Operations Management <sup>1</sup>	3
MGMT 354	Human Resources Management <sup>1</sup>	3
MIS 210	Productivity Software <sup>1</sup>	3
MIS 310	Business Data Analysis and Visualization <sup>1</sup>	3
<b>Additional Required Coursework:</b>		
ACCT 209	Financial Accounting <sup>1</sup>	3
FIN 329	Principles of Insurance <sup>1</sup>	3
HCAM 265	Managed Care & Insurance <sup>1</sup>	3
HCAM 300	Healthcare Systems: Global Perspectives and Analysis <sup>1</sup>	3
or ECON 312	Critical Choices in Health Care Policy	
HCAM 430	Finance for Healthcare Organizations <sup>1</sup>	3
HCAM 480	Healthcare Value-Based Reimbursement Systems <sup>1</sup>	3
Subtotal		48
<b>Total Hours</b>		<b>60</b>

- <sup>1</sup> Course counts for 50% of Major requirements and Major GPA
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Additional Physician Assistant Prerequisite Courses

Code	Title	Hours
BIOL 210 or BIOL 330	Medical Microbiology with Lab Microbiology/Lab	3
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab (replaced BIOL 104)	4
BIOL 250	Genetics with Lab	4
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
CHEM 201	Organic Chemistry I	3
EXSC 250	Medical Terminology	3
PSYC 105	Introduction to Psychology	3

### Co-Curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership development
5. Service-learning classes
6. Career education and development
7. Internships
8. Volunteering in healthcare industry related settings
9. Job Shadowing

### Physician Assistant Studies (Master of Science in Physician Assistant Studies) Prerequisite Admission Requirements

#### For Application Requirements

Please refer to Slippery Rock University's Physician Assistant Studies (Master of Science in Physician Assistant Studies) website for requirements: <http://www.sru.edu/pa> (<http://www.sru.edu/pa/>).

#### Rock Studies 2

Code	Title	Hours
<b>Prerequisite Courses - SRU Physician Assistant</b>		
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 209		4
BIOL 309		4
BIOL 250	Genetics with Lab	4
BIOL 210 or BIOL 330	Medical Microbiology with Lab Microbiology/Lab	3
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4

CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
CHEM 201	Organic Chemistry I	3
EXSC 250 or HCAM 250	Medical Terminology Medical Terminology for Healthcare Administrators	3
PSYC 105	Introduction to Psychology	3
Inferential Statistics Course <sup>1</sup>		3
<b>Total Hours</b>		<b>39</b>

- <sup>1</sup> Any statistics course with inferential statistics embedded. See My Rock Audit for specific courses.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

HEALTH CARE ADMINISTRATION & MANAGEMENT - BS (2346)  
Concentration in Leadership Traditional PRE-PA  
Effective Summer 2022  
Revised 11.01.2022  
UCC 03.01.2022

## HCAM, Bachelor of Science (BS) - Concentration in Legal Environment

**1 Knowledge of the Healthcare Environment:** Students will demonstrate an accurate understanding of:

- Health care system structures.
- Reimbursement/payment models.
- Factors associated with population health.

(UG 02, UG 09)

**2 Business Technology and Analytics:** Students will articulate an applied understanding of key quality improvement metrics and methods to support evidence-based practice guidelines including:

- Demonstrate knowledge, skills and abilities to plan for and ensure the security, integrity, and privacy of data and confidentiality of the end user.
- Demonstrate an ability to identify, aggregate, and summarize technical information for technical and non-technical personnel.

(UG 02, UG 10)

**3 Communication and Relationship Management:** Students will demonstrate the ability to interact and communicate effectively by:

- Presenting information in oral and written formats.
- Collaborating effectively with others.



(UG 01, UG 05, UG 08, UG 09)

**4 Financial Management and Economic Reasoning:** Students will demonstrate:

- An ability to analyze, quantify, evaluate and determine the sound allocation of financial resources.
- An ability to apply economic concepts for efficient allocation of scarce resources.

(UG 02, UG 04)

**5 Healthcare Legal Environment and Ethics:** Students will be able to:

- Recognize will ethical dilemmas in healthcare.
- Recognize key healthcare legal and regulatory environment parameters.
- Demonstrate discern viable options for ethical guided decision-making processes.
- Demonstrate applied legal and regulatory reasoning.

(UG 02, UG 05, UG 07, UG 08, UG 09)

**6 Organizational Dynamics:** Students will articulate an applied understanding of:

- Organizational mission, vision, and culture.
- Behaviors associated with organizational commitment and job performance.

(UG 05, UG 07, UG 08, UG 09)

## Academic Policies for Students in the Health Care Administration and Management (HCAM) Major

*Effective for all Health Care Administration and Management (HCAM) Majors beginning Fall 2021*

1. Policy for earning acceptable grades in the HCAM program:
  - a. A student must earn a grade of "C" or better in ALL Required Basic Courses (HCAM 230, HCAM 265, HCAM 275) and Required Upper-Level Courses (HCAM 305, HCAM 360, HCAM 400, HCAM 430, HCAM 450, HCAM 480, and HCAM 499).
  - b. A student must earn a grade of "C" or better in ALL non-HCAM major Requirements (ACCT 209, ACCT 340, ECON 312, HLTH 210, and MIS 210, STAT 152 or ECON 219/MGMT 219).
  - c. The HCAM curriculum is structured with pre-requisites. A student must earn a "C" or better in the pre-requisite course to be able to take the next course. See course catalog for pre-requisites.
  - d. If a student does not earn a "C" or better, they will be required to:
    - i. Retake the course
    - ii. They will be dropped from any course(s) in the following semester that requires a "C" or better as a pre-requisite (see course catalog for pre-requisites)
    - iii. Students will need to meet with their Academic Advisor and change their schedule accordingly
2. SRU has a *Repeat of Courses Policy* as follows and it can be found in the course catalog: **Repeat of Courses < Slippery Rock University (sru.edu)**
  - a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used

in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade. Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis. Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades. In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for post-baccalaureate students is the same as the undergraduate student policy.

3. Once the student has exceeded the *SRU Repeat of Courses Policy*, the student will have their major changed to Exploratory and HCAM Major courses will be removed from their schedule.
4. Additional costs associated with the HCAM major:
  - a. Lab fees will be collected for classes with a lab component. This fee enhances the University's ability to offer a high-quality program.
  - b. A student in the HCAM major may be required to purchase Student Professional Liability Insurance while enrolled in HCAM 450 at their own cost. More information will be provided to students in the upper level HCAM courses.
  - c. HCAM 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

## Related Links

Healthcare Administration and Management - Legal Environment, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/health-care-administration-and-management/>)

Healthcare Administration Department Page (<https://www.sru.edu/academics/colleges-and-departments/cohp/departments/health-care-administration-and-management/hcam-programs/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

- 2.0 GPA overall or higher to declare HCAM as major
- 2.0 GPA or higher in the major to graduate in HCAM
- 2.0 GPA or higher and instructor permission to apply for the internship

## Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements/Concentration	60
	Electives	18

\* All undergraduate degree programs require a minimum of 120 credits.  
Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
Required Thematic Thread Coursework:		
ECON 202	Principles of Microeconomics (Must be included as part of the 12 Thematic Thread credits)	
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements/Concentration

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Basic Courses</b>		
HCAM 230	US Healthcare Systems <sup>1</sup>	3
HCAM 360	Healthcare Organizational Dynamics <sup>1</sup>	3
HCAM 450	Internship-Health Care Administration & Management <sup>1</sup>	3
HCAM 499	Health Care Theory and Research Capstone Seminar <sup>1</sup>	3
Subtotal		12
<b>Legal Environment Core Courses</b>		
ACCT 340	Legal Environment of Business <sup>1</sup>	3
CSS 370	Fraud Law and Report Writing <sup>1</sup>	3
	or COMM 410 Communication Law	
HCAM 265	Managed Care & Insurance	3
HCAM 385		3
HCAM 275	Health Care Legal & Ethical Foundations <sup>1</sup>	3
HCAM 400	Legal Environment of Healthcare <sup>1</sup>	3
	or ACCT 400 Legal Environment of Healthcare	
PHIL 113	Formal Logic <sup>1</sup>	3
POLS 223	Law and Courts <sup>1</sup>	3
POLS 359	Policy Analysis and Evaluation	3

POLS 403	Constitutional Law <sup>1</sup>	3
or ACCT 451	Employment Law	
or MGMT 451	Employment Law	
Subtotal		30
<b>Additional Required Coursework</b>		
ACCT 209	Financial Accounting <sup>1</sup>	3
HCAM 305	Health Care Quality & Process Improvement <sup>1</sup>	3
HCAM 430	Finance for Healthcare Organizations <sup>1</sup>	3
HCAM 480	Healthcare Value-Based Reimbursement Systems <sup>1</sup>	3
HCAM 200	Introduction to Population Health <sup>1</sup>	3
or HLTH 210	Introduction to Public Health	
MIS 210	Productivity Software <sup>1</sup>	3
Subtotal		18
<b>Total Hours</b>		<b>60</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership development
5. Service-learning classes
6. Career education and development
7. Internships
8. Volunteering in healthcare industry related settings
9. Job Shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

HEALTH CARE ADMINISTRATION & MANAGEMENT - BS (2346)  
Concentration in Legal Environment (LEEN)

This program is effective as of Summer 2022

Revised 02.23.2023

UCC 02.14.2023

## HCAM, Bachelor of Science (BS) - Concentration in Long-Term Care

**1 Knowledge of the Healthcare Environment:** Students will demonstrate an accurate understanding of:

- Health care system structures.
- Reimbursement/payment models.
- Factors associated with population health.

(UG 02, UG 09)

**2 Business Technology and Analytics:** Students will articulate an applied understanding of key quality improvement metrics and methods to support evidence-based practice guidelines including:

- Demonstrate knowledge, skills and abilities to plan for and ensure the security, integrity, and privacy of data and confidentiality of the end user.
- Demonstrate an ability to identify, aggregate, and summarize technical information for technical and non-technical personnel.

(UG 02, UG 10)

**3 Communication and Relationship Management:** Students will demonstrate the ability to interact and communicate effectively by:

- Presenting information in oral and written formats.
- Collaborating effectively with others.

(UG 01, UG 05, UG 08, UG 09)

**4 Financial Management and Economic Reasoning:** Students will demonstrate:

- An ability to analyze, quantify, evaluate and determine the sound allocation of financial resources.
- An ability to apply economic concepts for efficient allocation of scarce resources.

(UG 02, UG 04)

**5 Healthcare Legal Environment and Ethics:** Students will be able to:

- Recognize will ethical dilemmas in healthcare.
- Recognize key healthcare legal and regulatory environment parameters.
- Demonstrate discern viable options for ethical guided decision-making processes.
- Demonstrate applied legal and regulatory reasoning.

(UG 02, UG 05, UG 07, UG 08, UG 09)

**6 Organizational Dynamics:** Students will articulate an applied understanding of:

- Organizational mission, vision, and culture.
- Behaviors associated with organizational commitment and job performance.

(UG 05, UG 07, UG 08, UG 09)

## Academic Policies for Students in the Health Care Administration and Management (HCAM) Major

*Effective for all Health Care Administration and Management (HCAM) Majors beginning Fall 2021*

1. Policy for earning acceptable grades in the HCAM program:
  - a. A student must earn a grade of "C" or better in ALL Required Basic Courses (HCAM 230, HCAM 265, HCAM 275) and Required Upper-Level Courses (HCAM 305, HCAM 360, HCAM 400, HCAM 430, HCAM 450, HCAM 480, and HCAM 499).
  - b. A student must earn a grade of "C" or better in ALL non-HCAM major Requirements (ACCT 209, ACCT 340, ECON 312, HLTH 210, and MIS 210, STAT 152 or ECON 219/MGMT 219).
  - c. The HCAM curriculum is structured with pre-requisites. A student must earn a "C" or better in the pre-requisite course to be able to take the next course. See course catalog for pre-requisites.
  - d. If a student does not earn a "C" or better, they will be required to:
    - i. Retake the course
    - ii. They will be dropped from any course(s) in the following semester that requires a "C" or better as a pre-requisite (see course catalog for pre-requisites)
    - iii. Students will need to meet with their Academic Advisor and change their schedule accordingly
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  - a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade. Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis. Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades. In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for post-baccalaureate students is the same as the undergraduate student policy.
3. Once the student has exceeded the *SRU Repeat of Courses Policy*, the student will have their major changed to Exploratory and HCAM Major courses will be removed from their schedule.
4. Additional costs associated with the HCAM major:
  - a. Lab fees will be collected for classes with a lab component. This fee enhances the University's ability to offer a high-quality program.
  - b. A student in the HCAM major may be required to purchase Student Professional Liability Insurance while enrolled in

HCAM 450 at their own cost. More information will be provided to students in the upper level HCAM courses.

- c. HCAM 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

## Related Links

Healthcare Administration and Management - Long-Term Care, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/health-care-administration-and-management/>)

Healthcare Administration Department Page (<https://www.sru.edu/academics/colleges-and-departments/cohp/departments/health-care-administration-and-management/hcam-programs/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

- 2.0 GPA overall or higher to declare HCAM as major
- 2.0 GPA or higher in the major to graduate in HCAM
- 2.0 GPA or higher and instructor permission to apply for the internship

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	60
	Electives	18

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3

<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
Required Thematic Thread Coursework:		
ECON 202	Principles of Microeconomics (Must be included as part of the 12 Thematic Thread credits)	
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Core Courses</b>		
HCAM 230	US Healthcare Systems <sup>1</sup>	3
HCAM 360	Healthcare Organizational Dynamics <sup>1</sup>	3
HCAM 450	Internship-Health Care Administration & Management <sup>1</sup>	3
HCAM 499	Health Care Theory and Research Capstone Seminar <sup>1</sup>	3
Subtotal		12
<b>Long-Term Care Management Core Courses</b>		
GERO 265	Aging and the Older Person (Required) <sup>1</sup>	3
HCAM 275	Health Care Legal & Ethical Foundations <sup>1</sup>	3
HCAM 305	Health Care Quality & Process Improvement <sup>1</sup>	3
HCAM 400	Legal Environment of Healthcare <sup>1</sup>	3
or ACCT 400	Legal Environment of Healthcare	
HCAM 425	Long Term Care Management (Required) <sup>1</sup>	3
HCAM 430	Finance for Healthcare Organizations <sup>1</sup>	3
HLTH 210	Introduction to Public Health <sup>1</sup>	3
or HCAM 200	Introduction to Population Health	
Select two of the following:		6
GERO 414	Death and Dying <sup>1</sup>	
GERO 465	Seminar in Gerontology <sup>1</sup>	
HCAM 470	Healthcare Practice Management	
INDP 342	Sociology of Aging <sup>1</sup>	
RCTH 420	Recreational Therapy for Older Adults <sup>1</sup>	
<b>Additional Requirement Coursework</b>		
ACCT 209	Financial Accounting <sup>1</sup>	3
HCAM 265	Managed Care & Insurance	3
HCAM 385		3
HCAM 300	Healthcare Systems: Global Perspectives and Analysis <sup>1</sup>	3
or ECON 312	Critical Choices in Health Care Policy	
HCAM 480	Healthcare Value-Based Reimbursement Systems <sup>1</sup>	3
MIS 210	Productivity Software <sup>1</sup>	3
MIS 310	Business Data Analysis and Visualization <sup>1</sup>	3
<b>Total Hours</b>		<b>60</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:



1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership development
5. Service-learning classes
6. Career education and development
7. Internships
8. Volunteering in healthcare industry related settings
9. Job Shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

HEALTH CARE ADMINISTRATION & MANAGEMENT - BS (2346)

Concentration in Long-Term Care (LTCA)

This program is effective as of Summer 2022

Revised 02.23.2023

UCC 02.14.2023

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
HCAM 230	US Healthcare Systems	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
STAT 152	Elementary Statistics I	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
HCAM 265	Managed Care & Insurance	3
ENGL 104	Critical Reading	3
HLTH 210 or HCAM 200	Introduction to Public Health or Introduction to Population Health	3
SCI 101	Science of Life	3
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
HCAM 275	Health Care Legal & Ethical Foundations	3
GERO 265	Aging and the Older Person (LTC track)	3
SCI 102	Understanding the Physical World	3

Humanities Inquiry (p. 29)		3
Thematic Thread Requirement ECON 202 Principles of Microeconomics		3
Declare a Thematic Thread <sup>4</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
HCAM 360	Healthcare Organizational Dynamics	3
MIS 210	Productivity Software	3
Social Science Inquiry (p. 29)		3
Thematic Thread Requirement (p. 29)		3
Free Elective (Recommend HCAM or in Minor)		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
HCAM 305	Health Care Quality & Process Improvement	3
ACCT 209	Financial Accounting	3
HCAM 400 or ACCT 400	Legal Environment of Healthcare or Legal Environment of Healthcare	3
HCAM 430	Finance for Healthcare Organizations	3
Long-term Care Elective: (Free of Select from Choose Two Long-Term Care Track Electives) <sup>3</sup>		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
MIS 310	Business Data Analysis and Visualization	3
HCAM 425	Long Term Care Management (LTC track) (S) <sup>3</sup>	3
Thematic Thread Requirement (p. 29)		3
HCAM 480	Healthcare Value-Based Reimbursement Systems	3
Long-term Care Elective: (Select from Choose Two Long-term Care Track Electives) <sup>4</sup>		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
HCAM 450 or HCAM 499	Internship-Health Care Administration & Management <sup>2</sup> or Health Care Theory and Research Capstone Seminar	3
Thematic Thread Requirement (Upper Level) (p. 29)		3
FIN 329	Principles of Insurance	3
Free Elective (Recommend HCAM or in Minor) <sup>3</sup>		3
Free Elective (Recommend HCAM or in Minor) <sup>3</sup>		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
HCAM 499 or HCAM 450	Health Care Theory and Research Capstone Seminar <sup>2</sup> or Internship-Health Care Administration & Management	3
ECON 312 or HCAM 300	Critical Choices in Health Care Policy or Healthcare Systems: Global Perspectives and Analysis	3
Free Elective (Recommend HCAM or in Minor) <sup>3</sup>		3
Free Elective (Recommend HCAM or in Minor) <sup>3</sup>		3

Free Elective (Recommend HCAM or in Minor) <sup>3</sup>	3
<b>Hours</b>	<b>15</b>
<b>Total Hours**</b>	<b>121</b>

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.
- <sup>2</sup> Must have "Sufficient Academic Performance" and earn "C" or better in the course. Please refer to the Academic Policies for Students in the HCAM major.
- <sup>3</sup> Course may have a prerequisite
- <sup>4</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.
- \* Students are encouraged to take ESAP 101 as a Free Elective.

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

Major Code: 2346

Concentration Code: LTCM

Revised: 06.07.2022

## HCAM, Bachelor of Science (BS) - Concentration in Marketing and Sales

**1 Knowledge of the Healthcare Environment:** Students will demonstrate an accurate understanding of:

- Health care system structures.
- Reimbursement/payment models.
- Factors associated with population health.

(UG 02, UG 09)

**2 Business Technology and Analytics:** Students will articulate an applied understanding of key quality improvement metrics and methods to support evidence-based practice guidelines including:

- Demonstrate knowledge, skills and abilities to plan for and ensure the security, integrity, and privacy of data and confidentiality of the end user.
- Demonstrate an ability to identify, aggregate, and summarize technical information for technical and non-technical personnel.

(UG 02, UG 10)

**3 Communication and Relationship Management:** Students will demonstrate the ability to interact and communicate effectively by:

- Presenting information in oral and written formats.
- Collaborating effectively with others.

(UG 01, UG 05, UG 08, UG 09)

**4 Financial Management and Economic Reasoning:** Students will demonstrate:

- An ability to analyze, quantify, evaluate and determine the sound allocation of financial resources.

- An ability to apply economic concepts for efficient allocation of scarce resources.

(UG 02, UG 04)

**5 Healthcare Legal Environment and Ethics:** Students will be able to:

- Recognize will ethical dilemmas in healthcare.
- Recognize key healthcare legal and regulatory environment parameters.
- Demonstrate discern viable options for ethical guided decision-making processes.
- Demonstrate applied legal and regulatory reasoning.

(UG 02, UG 05, UG 07, UG 08, UG 09)

**6 Organizational Dynamics:** Students will articulate an applied understanding of:

- Organizational mission, vision, and culture.
- Behaviors associated with organizational commitment and job performance.

(UG 05, UG 07, UG 08, UG 09)

## Academic Policies for Students in the Health Care Administration and Management (HCAM) Major

*Effective for all Health Care Administration and Management (HCAM) Majors beginning Fall 2021*

1. Policy for earning acceptable grades in the HCAM program:
  - a. A student must earn a grade of "C" or better in ALL Required Basic Courses (HCAM 230, HCAM 265, HCAM 275) and Required Upper-Level Courses (HCAM 305, HCAM 360, HCAM 400, HCAM 430, HCAM 450, HCAM 480, and HCAM 499).
  - b. A student must earn a grade of "C" or better in ALL non-HCAM major Requirements (ACCT 209, ACCT 340, ECON 312, HLTH 210, and MIS 210, STAT 152 or ECON 219/MGMT 219).
  - c. The HCAM curriculum is structured with pre-requisites. A student must earn a "C" or better in the pre-requisite course to be able to take the next course. See course catalog for pre-requisites.
  - d. If a student does not earn a "C" or better, they will be required to:
    - i. Retake the course
    - ii. They will be dropped from any course(s) in the following semester that requires a "C" or better as a pre-requisite (see course catalog for pre-requisites)
    - iii. Students will need to meet with their Academic Advisor and change their schedule accordingly
2. SRU has a *Repeat of Courses Policy* as follows and it can be found in the course catalog: **Repeat of Courses < Slippery Rock University (sru.edu)**
  - a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an

earned grade. Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis. Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades. In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for post-baccalaureate students is the same as the undergraduate student policy.

3. Once the student has exceeded the *SRU Repeat of Courses Policy*, the student will have their major changed to Exploratory and HCAM Major courses will be removed from their schedule.
4. Additional costs associated with the HCAM major:
  - a. Lab fees will be collected for classes with a lab component. This fee enhances the University's ability to offer a high-quality program.
  - b. A student in the HCAM major may be required to purchase Student Professional Liability Insurance while enrolled in HCAM 450 at their own cost. More information will be provided to students in the upper level HCAM courses.
  - c. HCAM 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

## Related Links

Healthcare Administration and Management - Marketing and Sales, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/health-care-administration-and-management/>)

Healthcare Administration Department Page (<https://www.sru.edu/academics/colleges-and-departments/cohp/departments/health-care-administration-and-management/hcam-programs/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

- 2.0 GPA overall or higher to declare HCAM as major
- 2.0 GPA or higher in the major to graduate in HCAM
- 2.0 GPA or higher and instructor permission to apply for the internship

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	60
	Electives	18

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
Required Thematic Thread Coursework:		
ECON 202	Principles of Microeconomics (Must be included as part of the 12 Thematic Thread credits)	
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Core Courses</b>		
HCAM 230	US Healthcare Systems <sup>1</sup>	3
HCAM 360	Healthcare Organizational Dynamics <sup>1</sup>	3
HCAM 450	Internship-Health Care Administration & Management <sup>1</sup>	3
HCAM 499	Health Care Theory and Research Capstone Seminar <sup>1</sup>	3
Subtotal		12
<b>Marketing &amp; Sales Management Core Courses</b>		
HCAM 265	Managed Care & Insurance	3
HCAM 275	Health Care Legal & Ethical Foundations <sup>1</sup>	3
HCAM 415	Marketing for Health Care Organizations <sup>1</sup>	3
or COMM 270	Strategic Health Communication	
MRKT 230	Principles of Marketing <sup>1</sup>	3
MRKT 332	Business Marketing	3
MRKT 333	Consumer Behavior <sup>1</sup>	3
MRKT 336	Professional Selling <sup>1</sup>	3
or MRKT 430	Marketing Research	
Subtotal		21
<b>Additional Required Coursework</b>		
ACCT 209	Financial Accounting	3
HCAM 200	Introduction to Population Health	3
or HLTH 210	Introduction to Public Health	
HCAM 385		3
HCAM 300	Healthcare Systems: Global Perspectives and Analysis	3
or ECON 312	Critical Choices in Health Care Policy	
HCAM 305	Health Care Quality & Process Improvement	3
HCAM 400	Legal Environment of Healthcare	3

	or ACCT 400	Legal Environment of Healthcare	
HCAM 430		Finance for Healthcare Organizations	3
HCAM 480		Healthcare Value-Based Reimbursement Systems	3
MIS 210		Productivity Software	3
<b>Total Hours</b>			<b>60</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership development
5. Service-learning classes
6. Career education and development
7. Internships
8. Volunteering in healthcare industry related settings
9. Job Shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

HEALTH CARE ADMINISTRATION & MANAGEMENT - BS (2346)

Concentration in Marketing & Sale (MKSA)

This program is effective as of Summer 2022

Revised 02.23.2023

UCC 02.14.2023

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
HCAM 230	US Healthcare Systems	3
ENGL 102	Critical Writing	3
ESAP 101	FIRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	

PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
STAT 152	Elementary Statistics I	3
<b>Hours</b>		<b>16</b>

**Spring**

HCAM 265	Managed Care & Insurance	3
ENGL 104	Critical Reading	3
HLTH 210 or HCAM 200	Introduction to Public Health or Introduction to Population Health	3
SCI 102	Understanding the Physical World	3
Thematic Thread Requirement (or Free Elective) (p. 29)		3
<b>Hours</b>		<b>15</b>

**Second Year****Fall**

ACCT 209	Financial Accounting	3
HCAM 275	Health Care Legal & Ethical Foundations	3
SCI 101	Science of Life	3
MRKT 230	Principles of Marketing	3
Thematic Thread Requirement ECON 202 Principles of Microeconomics		3
Declare a Thematic Thread <sup>4</sup>		
<b>Hours</b>		<b>15</b>

**Spring**

HCAM 360	Healthcare Organizational Dynamics	3
MIS 210	Productivity Software	3
Social Science Inquiry (p. 29)		3
Humanities Inquiry (p. 29)		3
COMM 270 or HCAM 415	Strategic Health Communication or Marketing for Health Care Organizations	3
<b>Hours</b>		<b>15</b>

**Third Year****Fall**

HCAM 305	Health Care Quality & Process Improvement <sup>2</sup>	3
HCAM 400 or ACCT 400	Legal Environment of Healthcare or Legal Environment of Healthcare	3
HCAM 430	Finance for Healthcare Organizations	3
MRKT 332	Business Marketing	3
Thematic Thread Requirement (Upper Level) (p. 29)		3
<b>Hours</b>		<b>15</b>

**Spring**

HCAM 480	Healthcare Value-Based Reimbursement Systems	3
FIN 329	Principles of Insurance	3
MRKT 333	Consumer Behavior	3
MRKT 336 or MRKT 430	Professional Selling or Marketing Research	3
Free Elective (Recommend HCAM or in Minor)		3
<b>Hours</b>		<b>15</b>

**Fourth Year****Fall**

HCAM 450 or HCAM 499	Internship-Health Care Administration & Management <sup>2</sup> or Health Care Theory and Research Capstone Seminar	3
Thematic Thread Requirement (Upper Level) (p. 29)		3
Free Elective (Recommend HCAM or in Minor) <sup>3</sup>		3
Free Elective (Recommend HCAM or in Minor) <sup>3</sup>		3
Free Elective (Recommend HCAM or in Minor) <sup>3</sup>		3
<b>Hours</b>		<b>15</b>

**Spring**

HCAM 499 or HCAM 450	Health Care Theory and Research Capstone Seminar <sup>2</sup> or Internship-Health Care Administration & Management	3
ECON 312 or HCAM 300	Critical Choices in Health Care Policy or Healthcare Systems: Global Perspectives and Analysis	3
Free Elective (Recommend HCAM or in Minor) <sup>3</sup>		3
Free Elective (Recommend HCAM or in Minor) <sup>3</sup>		3
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>

**Total Hours\*\*****121**

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Must have "Sufficient Academic Performance" and earn "C" or better in the course. Please refer to the Academic Policies for Students in the HCAM major.

<sup>3</sup> Course may have a prerequisite

<sup>4</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 2346

Concentration Code: MKSM

Revised: 06.07.2022

## HCAM, Bachelor of Science (BS) - Concentration in Medical Device Sales

### Program Learning Outcomes

- **Business Technology and Analytics:** Students will articulate an applied understanding of key quality improvement metrics and methods to support evidence-based practice guidelines including:



- Demonstrate knowledge, skills and abilities to plan for and ensure the security, integrity, and privacy of data and confidentiality of the end user.
- Demonstrate an ability to identify, aggregate, and summarize technical information for technical and non-technical personnel.
- **Communication and Relationship Management:** Students will demonstrate the ability to interact and communicate effectively by:
  - Presenting information in oral and written formats.
  - Collaborating effectively with others.
- **Financial Management and Economic Reasoning:** Students will demonstrate:
  - An ability to analyze, quantify, evaluate and determine the sound allocation of financial resources.
  - An ability to apply economic concepts for efficient allocation of scarce resources.
- **Healthcare Legal Environment and Ethics:** Students will be able to:
  - Recognize will ethical dilemmas in healthcare.
  - Recognize key healthcare legal and regulatory environment parameters.
  - Demonstrate discern viable options for ethical guided decision-making processes.
  - Demonstrate applied legal and regulatory reasoning.
- **Knowledge of the Healthcare Environment:** Students will demonstrate an accurate understanding of:
  - Health care system structures.
  - Reimbursement/payment models.
  - Factors associated with population health.
- **Organizational Dynamics:** Students will articulate an applied understanding of:
  - Organizational mission, vision, and culture.
  - Behaviors associated with organizational commitment and job performance.

## Academic Policies for Students in the Health Care Administration and Management (HCAM) Major

*Effective for all Health Care Administration and Management (HCAM) Majors beginning Fall 2021*

1. Policy for earning acceptable grades in the HCAM program:
  - a. A student must earn a grade of "C" or better in ALL Required Basic Courses (HCAM 230, HCAM 265, HCAM 275) and Required Upper-Level Courses (HCAM 305, HCAM 360, HCAM 400, HCAM 430, HCAM 450, HCAM 480, and HCAM 499).
  - b. A student must earn a grade of "C" or better in ALL non-HCAM major Requirements (ACCT 209, ACCT 340, ECON 312, HLTH 210, and MIS 210, STAT 152 or ECON 219/MGMT 219).
  - c. The HCAM curriculum is structured with pre-requisites. A student must earn a "C" or better in the pre-requisite course to be able to take the next course. See course catalog for pre-requisites.
  - d. If a student does not earn a "C" or better, they will be required to:
    - i. Retake the course
    - ii. They will be dropped from any course(s) in the following semester that requires a "C" or better as a pre-requisite (see course catalog for pre-requisites)
2. SRU has a *Repeat of Courses Policy* as follows and it can be found in the course catalog: **Repeat of Courses < Slippery Rock University (sru.edu)**
  - iii. Students will need to meet with their Academic Advisor and change their schedule accordingly
  - a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade. Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis. Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades. In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for post-baccalaureate students is the same as the undergraduate student policy.
3. Once the student has exceeded the *SRU Repeat of Courses Policy*, the student will have their major changed to Exploratory and HCAM Major courses will be removed from their schedule.
4. Additional costs associated with the HCAM major:
  - a. Lab fees will be collected for classes with a lab component. This fee enhances the University's ability to offer a high-quality program.
  - b. A student in the HCAM major may be required to purchase Student Professional Liability Insurance while enrolled in HCAM 450 at their own cost. More information will be provided to students in the upper level HCAM courses.
  - c. HCAM 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

### Related Links

Healthcare Administration and Management - Medical Device Sales, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/health-care-administration-and-management/>)

Healthcare Administration Department Page (<https://www.sru.edu/academics/colleges-and-departments/cohp/departments/health-care-administration-and-management/hcam-programs/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

Curriculum Guide

GPA Requirement

- 2.0 GPA overall or higher to declare HCAM as major
- 2.0 GPA or higher in the major to graduate in HCAM
- 2.0 GPA or higher and instructor permission to apply for the internship

Summary\*

Code	Title	Hours
Rock Studies 2 Requirements		43
Other Basic Requirements		0-3
Computer Competency		0-3
Major Requirements/Concentration		60
Electives		18

\* All undergraduate degree programs require a minimum of 120 credits.  
Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
BIOL 216	Anatomy and Physiology I with Lab	3
<i>Physical Sciences Inquiry</i>		
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
Subtotal		16
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
Required Thematic Thread Coursework:		
ECON 202	Principles of Microeconomics (Must be included as part of the 12 Thematic Thread credits)	
Total Hours		43

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
Total Hours		0-3

Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
Total Hours		0-3

DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

Major Requirements/Concentration

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Basic Courses</b>		
HCAM 230	US Healthcare Systems <sup>1</sup>	3
HCAM 360	Healthcare Organizational Dynamics <sup>1</sup>	3
HCAM 450	Internship-Health Care Administration & Management <sup>1</sup>	3
HCAM 499	Health Care Theory and Research Capstone Seminar <sup>1</sup>	3
Subtotal		12
<b>Medical Device Sales Core Courses</b>		
<i>Legal Environment</i>		
HCAM 265	Managed Care & Insurance <sup>1</sup>	3
HCAM 275	Health Care Legal & Ethical Foundations <sup>1</sup>	3
HCAM 400	Legal Environment of Healthcare <sup>1</sup>	3
or ACCT 400	Legal Environment of Healthcare	

Subtotal		9
<i>Science Foundations</i>		
BIOL 210	Medical Microbiology with Lab <sup>1</sup>	3
BIOL 217	Anatomy and Physiology II with Lab <sup>1</sup>	3
ENGR 220	Engineering Materials <sup>1</sup>	3
HCAM 250	Medical Terminology for Healthcare Administrators <sup>1</sup>	3
or EXSC 250	Medical Terminology	
Subtotal		12
<i>Marketing and Sales Foundations</i>		
HCAM 415	Marketing for Health Care Organizations <sup>1</sup>	3
HEMT 326	Introduction to Meetings and Event Management <sup>1</sup>	3
MRKT 230	Principles of Marketing <sup>1</sup>	3
MRKT 336	Professional Selling <sup>1</sup>	3
Subtotal		12
<i>Additional Required Courses</i>		
ACCT 209	Financial Accounting <sup>1</sup>	3
HCAM 305	Health Care Quality & Process Improvement <sup>1</sup>	3
HCAM 430	Finance for Healthcare Organizations <sup>1</sup>	3
HCAM 480	Healthcare Value-Based Reimbursement Systems <sup>1</sup>	3
MIS 210	Productivity Software <sup>1</sup>	3
Subtotal		15
<b>Total Hours</b>		<b>60</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership development
5. Service-learning classes
6. Career education and development
7. Internships
8. Volunteering in healthcare industry related settings
9. Job Shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information*

on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

HEALTH CARE ADMINISTRATION & MANAGEMENT - BS (2346)

Concentration in Medical Device Sales (MEDS)

This program is effective as of Summer 2022

Revised 10.31.2022

UCC 09.06.2022

## HCAM, Bachelor of Science (BS) - Concentration in Quality and Risk Management

**1 Knowledge of the Healthcare Environment:** Students will demonstrate an accurate understanding of:

- Health care system structures.
- Reimbursement/payment models.
- Factors associated with population health.

(UG 02, UG 09)

**2 Business Technology and Analytics:** Students will articulate an applied understanding of key quality improvement metrics and methods to support evidence-based practice guidelines including:

- Demonstrate knowledge, skills and abilities to plan for and ensure the security, integrity, and privacy of data and confidentiality of the end user.
- Demonstrate an ability to identify, aggregate, and summarize technical information for technical and non-technical personnel.

(UG 02, UG 10)

**3 Communication and Relationship Management:** Students will demonstrate the ability to interact and communicate effectively by:

- Presenting information in oral and written formats.
- Collaborating effectively with others.

(UG 01, UG 05, UG 08, UG 09)

**4 Financial Management and Economic Reasoning:** Students will demonstrate:

- An ability to analyze, quantify, evaluate and determine the sound allocation of financial resources.
- An ability to apply economic concepts for efficient allocation of scarce resources.

(UG 02, UG 04)

**5 Healthcare Legal Environment and Ethics:** Students will be able to:

- Recognize will ethical dilemmas in healthcare.
- Recognize key healthcare legal and regulatory environment parameters.
- Demonstrate discern viable options for ethical guided decision-making processes.
- Demonstrate applied legal and regulatory reasoning.

(UG 02, UG 05, UG 07, UG 08, UG 09)

**6 Organizational Dynamics:** Students will articulate an applied understanding of:

- Organizational mission, vision, and culture.
- Behaviors associated with organizational commitment and job performance.

(UG 05, UG 07, UG 08, UG 09)

## Academic Policies for Students in the Health Care Administration and Management (HCAM) Major

*Effective for all Health Care Administration and Management (HCAM) Majors beginning Fall 2021*

1. Policy for earning acceptable grades in the HCAM program:
  - a. A student must earn a grade of "C" or better in ALL Required Basic Courses (HCAM 230, HCAM 265, HCAM 275) and Required Upper-Level Courses (HCAM 305, HCAM 360, HCAM 400, HCAM 430, HCAM 450, HCAM 480, and HCAM 499).
  - b. A student must earn a grade of "C" or better in ALL non-HCAM major Requirements (ACCT 209, ACCT 340, ECON 312, HLTH 210, and MIS 210, STAT 152 or ECON 219/MGMT 219).
  - c. The HCAM curriculum is structured with pre-requisites. A student must earn a "C" or better in the pre-requisite course to be able to take the next course. See course catalog for pre-requisites.
  - d. If a student does not earn a "C" or better, they will be required to:
    - i. Retake the course
    - ii. They will be dropped from any course(s) in the following semester that requires a "C" or better as a pre-requisite (see course catalog for pre-requisites)
    - iii. Students will need to meet with their Academic Advisor and change their schedule accordingly
2. SRU has a *Repeat of Courses Policy* as follows and it can be found in the course catalog: **Repeat of Courses < Slippery Rock University (sru.edu)**
  - a. Students may attempt to improve their grade point average by repeating courses. The most recent grade earned is used in calculating the GPA even if the earlier grade was higher. If a passed course is repeated and failed (or NC), the student will lose both the grade points and credits previously earned. However, all grades will appear on the transcript. Courses in which a grade was earned at Slippery Rock University may not be repeated at any institution. A grade of W (withdraw) does not count as an earned grade. Students who repeat a course must do so using the same grading system under which they originally took the course. For example, a student who originally took a course graded A-F may not repeat the course on a P/NC, P/F, or audit basis. Students may not repeat a course by using any Credit by Examination program if they originally took the course on a graded A-F, P/NC, P/F, or audit basis. Undergraduate students will be limited to a maximum total of six repeats during their entire SRU academic career, excluding withdrawal grades. In addition, repeats of a single course will be limited to a maximum of two. This means, no single course may be taken more than three times (excluding withdrawal grades). The course repeat policy for post-baccalaureate students is the same as the undergraduate student policy.

3. Once the student has exceeded the *SRU Repeat of Courses Policy*, the student will have their major changed to Exploratory and HCAM Major courses will be removed from their schedule.
4. Additional costs associated with the HCAM major:
  - a. Lab fees will be collected for classes with a lab component. This fee enhances the University's ability to offer a high-quality program.
  - b. A student in the HCAM major may be required to purchase Student Professional Liability Insurance while enrolled in HCAM 450 at their own cost. More information will be provided to students in the upper level HCAM courses.
  - c. HCAM 450 Internship: Certain sites may require one or more of the following: physical examinations, record of immunizations, TB test, criminal background checks, drug testing, specific certifications for CPR/AED (e.g., American Heart Association), and HIPAA training. These may require additional costs for students. Fulfilling these requirements and obtaining appropriate documentation is the responsibility of the student.

## Related Links

Healthcare Administration and Management - Quality and Risk Management, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/health-care-administration-and-management/>)

Healthcare Administration Department Page (<https://www.sru.edu/academics/colleges-and-departments/cohp/departments/health-care-administration-and-management/hcam-programs/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

2.0 GPA overall or higher to declare HCAM as major

2.0 GPA or higher in the major to graduate in HCAM

2.0 GPA or higher and instructor permission to apply for the internship

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements/Concentration	60
	Electives	18

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	

PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
Required Thematic Thread Coursework:		
ECON 202	Principles of Microeconomics (Must be included as part of the 12 Thematic Thread credits)	
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	

PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements/Concentration

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Basic Courses</b>		
HCAM 230	US Healthcare Systems <sup>1</sup>	3
HCAM 360	Healthcare Organizational Dynamics <sup>1</sup>	3
HCAM 450	Internship-Health Care Administration & Management <sup>1</sup>	3
HCAM 499	Health Care Theory and Research Capstone Seminar <sup>1</sup>	3
Subtotal		12
<b>Quality and Risk Management Core Courses</b>		
HCAM 250	Medical Terminology for Healthcare Administrators <sup>1</sup>	3
or EXSC 250	Medical Terminology	
HCAM 265	Managed Care & Insurance	3
HCAM 385		3
HCAM 305	Health Care Quality & Process Improvement <sup>1</sup>	3
HCAM 400	Legal Environment of Healthcare <sup>1</sup>	3
or ACCT 400	Legal Environment of Healthcare	
HCAM 480	Healthcare Value-Based Reimbursement Systems <sup>1</sup>	3
Select one of the following:		3
HCAM 200	Introduction to Population Health <sup>1</sup>	
HLTH 210	Introduction to Public Health <sup>1</sup>	
NURS 440	Nursing Case Management in Today's Healthcare Environment <sup>1</sup>	3
SAFE 118	Introduction to Safety <sup>1</sup>	3
SAFE 368	Injury and Damage Incidents Evaluation <sup>1</sup>	3
SAFE 388	Insurance Risk and Loss Control Management <sup>1</sup>	3
SAFE 418	Security in the Workplace <sup>1</sup>	3
Subtotal		36
<b>Additional Required Coursework</b>		
ACCT 209	Financial Accounting <sup>1</sup>	3
HCAM 275	Health Care Legal & Ethical Foundations <sup>1</sup>	3
HCAM 430	Finance for Healthcare Organizations <sup>1</sup>	3
MIS 210	Productivity Software <sup>1</sup>	3
Subtotal		12
<b>Total Hours</b>		<b>60</b>



- <sup>1</sup> Course counts for 50% of Major requirements and Major GPA
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership development
5. Service-learning classes
6. Career education and development
7. Internships
8. Volunteering in healthcare industry related settings
9. Job Shadowing

## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

HEALTH CARE ADMINISTRATION & MANAGEMENT - BS (2346)  
Concentration in Quality and Risk Management (QURM)  
This program is effective as of Summer 2022  
Revised 02.23.2023  
UCC 02.14.2023

## HCAM, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

**1 Knowledge of the Healthcare Environment:** Students will demonstrate an accurate understanding of:

- Health care system structures.
- Reimbursement/payment models.
- Factors associated with population health.

(UG 02, UG 09)

**2 Business Technology and Analytics:** Students will articulate an applied understanding of key quality improvement metrics and methods to support evidence-based practice guidelines including:

- Demonstrate knowledge, skills and abilities to plan for and ensure the security, integrity, and privacy of data and confidentiality of the end user.

- Demonstrate an ability to identify, aggregate, and summarize technical information for technical and non-technical personnel.

(UG 02, UG 10)

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- Presenting information in oral and written formats.
- Collaborating effectively with others.

(UG 01, UG 05, UG 08, UG 09)

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(UG 02, UG 04)

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(UG 02, UG 05, UG 07, UG 08, UG 09)

**6 Organizational Dynamics:** Students will articulate an applied understanding of:

- Organizational mission, vision, and culture.
- Behaviors associated with organizational commitment and job performance.

(UG 05, UG 07, UG 08, UG 09)

## Related Links

Healthcare Administration and Management, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/health-care-administration-and-management/>)

Healthcare Administration Department Page (<https://www.sru.edu/academics/colleges-and-departments/cohp/departments/health-care-administration-and-management/hcam-programs/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU

- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Courses</b>		
HCAM 230	US Healthcare Systems	3
HCAM 265	Managed Care & Insurance	3
HCAM 300	Healthcare Systems: Global Perspectives and Analysis	3
HCAM 305	Health Care Quality & Process Improvement	3
HCAM 360 or MGMT 351	Healthcare Organizational Dynamics Organizational Behavior	3
Subtotal		15
<b>Additional Coursework</b>		
Select two of the following:		6
BIOL 216	Anatomy and Physiology I with Lab	
ACCT 340	Legal Environment of Business	
COMM 270	Strategic Health Communication	
ECON 312	Critical Choices in Health Care Policy	
ENGL 327	Healthcare Writing	
EXSC 250	Medical Terminology	
HCAM 275	Health Care Legal & Ethical Foundations	
HCAM 400	Legal Environment of Healthcare	
HCAM 410	Strategic Leadership in Health Care Organizations	
HCAM 415	Marketing for Health Care Organizations	
HCAM 425	Long Term Care Management	
HCAM 430	Finance for Healthcare Organizations	
HCAM 480	Healthcare Value-Based Reimbursement Systems	
HLTH 210	Introduction to Public Health	
MIS 403	Introduction to Healthcare Information Systems	
SPAN 121	Spanish for Health Professionals	
HCAM 385		
Subtotal		6
<b>Total Hours</b>		<b>21</b>

- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

## MINOR IN HEALTH CARE ADMINISTRATION & MANAGEMENT (51L)

Revised 10.28.21

UCC 03.02.21

## Nursing

Chair	Secretary	Location	Department Phone
Dr. Michele Crytzer	Tanya Turner	Harrisville Building, Room 201	724-738-2065

Department Web Site URL (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/nursing/>)

Department Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/nursing-fs.pdf>)

## THE ROCK DIFFERENCE

The Department of Nursing offers two totally online programs: RN to BSN Completion Program and School Nursing Certificate Program. The RN to BSN Completion Program at Slippery Rock University is designed to meet the needs of Registered Nurses who are graduates of hospital diploma nursing programs or Associate Degree programs in nursing.

The purpose of the RN-BSN program is to prepare baccalaureate educated practitioners of nursing to provide clinical leadership in the provision of health care to persons, families, and groups in a variety of settings. The program provides a strong educational foundation upon which to build graduate study. The purpose of the School Nurse Certificate program is to prepare students for Level I certification with the Pennsylvania Department of Education.

This program is designed to meet the needs of registered nurses who are graduates of hospital diploma nursing programs or associate degree programs in nursing. The nursing curriculum includes theoretical content and a practice experience. The flexibility of the program enables the registered nurse to attend school on a part-time or full-time basis. The purpose of the program is to prepare practitioners of nursing to provide clinical leadership in the provision of health care to persons, families, and groups in a variety of settings, using the nursing process. The program provides a strong educational foundation upon which to build graduate study. The program is accredited by the Commission on Collegiate Nursing Education (CCNE).

Admission requirements include:

- completion of a pre-licensure nursing program (RN diploma or associate degree)
- active unrestricted Registered Nurse license
- a 2.0 GPA in previous academic work

The curriculum for the program includes:

Code	Title	Hours
<b>Program Requirements</b>		
Seven core Nursing courses		21
One Nursing elective course		3
Two required supportive courses		6
<b>Total Hours</b>		<b>30</b>

All program courses are available online. Students in the RN-BSN nursing program are required to maintain good academic standing per university

standards from entry to exit. The students must achieve a grade of C or above in all nursing courses. Other minors can also be pursued while enrolled in the BSN program.

## Faculty

### Michele Crytzer

Associate Professor  
Nursing

Ed.D., Indiana University of PA  
M.S., Indiana University of PA  
B.S., Slippery Rock University

### Sandra Leh

Associate Professor  
Nursing

Ph.D., Widener University  
M.S., West Chester University  
B.S., Penn State University

### Sharon Melincavage

Associate Professor  
Nursing

Ed.D., Penn State University  
M.S., Bloomsburg University  
B.S., Kutztown University

### Christina Silva

Associate Professor  
Nursing

Ph.D., Indiana University of Pennsylvania  
M.S., University of Phoenix  
B.S., Penn State University

## PROGRAMS

### MAJORS

- Nursing, Bachelor of Science in Nursing (BSN) (RN-BSN) (p. 661)

## Courses

### NURS 139 - Foundations of Academic Discovery

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

### NURS 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

### NURS 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

### NURS 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

### NURS 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

### NURS 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

### NURS 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

**NURS 311 - Introduction to Health Care Informatics**

This course is designed to provide students with an opportunity to apply knowledge and skills from information science and computer science to the health care field. Emphasis will be on developing a basic understanding of how automation is used to manage information in healthcare. Topics covered include types of information systems used in healthcare, how to select and implement information systems, current developments in healthcare information systems, issues surrounding computers in health care. In this course the focus is on the computer as a tool for helping healthcare providers do their work.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Nursing.

**NURS 312 - Nursing in Transition**

Nursing 312 examines professional role socialization from a historic, contemporary, and futuristic view. It enables the student to develop communication and technology skills necessary for success in a collegiate nursing program.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing.

**NURS 322 - The Teaching-Learning Process in Nursing**

This course is designed for the registered nurse who desires greater knowledge and skill in assisting individuals, families, and groups to acquire health-related knowledge, skills, and values. The course provides opportunities from a conceptual and practical perspective to explore the dynamics that contribute to effective health education. Emphasis will be placed upon developing the nurses' abilities, confidence, and self-image as teachers.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing.

**NURS 327 - Group Process for Nursing**

Provides opportunities to develop leadership skills with groups for the purposes of maintaining, regaining or improving their levels of wellness. The focus is on the group as a system. Combined conceptual knowledge and practical skills needed to work effectively with health-related groups will be taught (3 credits theory)

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing.

**NURS 331 - Evidence Based Health Assessment and Promotion**

This course emphasizes the complete health assessment, the nursing process, and its relationship to the prevention and early detection of disease in clients across the life span. This course reinforces the processes of health assessment: interviewing, history-taking, and physical assessment. Dominant models, theories and perspectives are used to explain health behaviors in relation to evidence-based health promotion and health education strategies. Students are expected to correlate health assessment and promotion with current evidence. This course includes assignments with computer simulated standardized patients. Incorporated throughout the course is the importance of communication and collaboration across culturally diverse populations.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing.

**NURS 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

**NURS 395 - Workshop**

All academic departments list this workshop course. Please contact the individual department for more information. A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

**NURS 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

**NURS 406 - Politics and Policy Nursing**

This course is designed to enhance the student's understanding of health policy as it relates to professional nursing practice. Students will explore health care policy and the policy-making process at various levels of government, research the impact of special interest groups on policy, and learn effective strategies to interact with legislators as citizen lobbyists and/or members of professional nursing organizations.

Credits: 3

Term(s) Typically Offered: Offered Spring & Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Nursing.

**NURS 408 - Delivery of Nursing Care in a Managed Care Environment/Clinical**

This course prepares students to understand managed health care delivery systems and their impact of delivery and practice patterns with emphasis on the delivery of nursing care.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing.

**NURS 422 - Nursing Research & Evidence-Based Practice**

This course examines the fundamental concepts of nursing research and evidence-based practice (EBP). Students are prepared to become critical consumers of nursing research. Through the application of research evidence, students are provided the tools necessary to advance nursing practice and improve patient outcomes.

Prerequisites: NURS 311<sup>D</sup> and NURS 312<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing.

**NURS 426 - Community and Public Health Nursing**

In this course the focus is on the community as the client. Theories, models, and concepts from community and public health nursing are examined. A course project, the Community Assessment, provides students the opportunity to complete and analyze a community assessment.

Prerequisites: NURS 311<sup>D</sup> and NURS 312<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing.

**NURS 429 - Financial Management for Nursing Case Managers**

This course provides students with content related to current issues, tools (i.e. Excel spreadsheet), and regulation necessary to function as a nursing case manager.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing.

**NURS 430 - Leadership in Nursing and Healthcare Systems**

This course is designed to provide students with a working knowledge of concepts and processes of leadership theory and practice in nursing and healthcare systems. Students successfully completing this course will be able to identify the personal and situational factors affecting leadership performance and adapt their behavior to become more effective leaders.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

**NURS 432 - Practice Experience for Leadership and Management in Nursing**

As a practice experience, the student will apply concepts gleaned from previous courses and NURS 431 to enhance professional nursing practice. Nursing leadership and management theories will be applied within the practice environment by emphasizing planning, delivering, managing, and evaluating cost-effective quality care. This is a practice experience that requires completion of all 300 core nursing courses (NURS 311, 312, 327, 331) as prerequisites and NURS 431 as a co-requisite course.

Prerequisites: NURS 311<sup>C</sup> and NURS 312<sup>C</sup> and NURS 327<sup>C</sup> and NURS 331<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Corequisite(s): NURS 431

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Nursing.

**NURS 433 - Innovative Technology for Healthy Communities**

This course focuses on consumer health informatics and technology which explores how innovative technology can be used to improve individuals' health within various community settings. Topics include the mode of delivery of consumer health information such as Internet-based technology; shared access to individuals' private health information; quality of consumer health information via social media; and health and information literacy seeking behavior. Finally, various types of innovative technology used within the home environment or within a healthcare setting to support consumers within a home environment will be explored.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing.



**NURS 434 - Leadership and Management in Nursing with Practice Experience**

This course focuses on the theory for leadership and management roles, leadership theories, and the ethical decision-making process in the delivery of health care to diverse populations. The student will apply concepts from this course and gleaned from previous courses to enhance professional nursing practice in both the theoretical realm and the practice environment. Nursing leadership and management practices will be analyzed with an emphasis on planning, delivering, and evaluating cost-effective quality care. This is a course that requires completion of all 300 level core nursing courses (NURS 311, 312, 327, 331) as prerequisites.

Prerequisites: NURS 311<sup>C</sup> and NURS 312<sup>C</sup> and NURS 327<sup>C</sup> and NURS 331<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Nursing.

**NURS 440 - Nursing Case Management in Today's Healthcare Environment**

This course is designed to prepare students to understand the case management responsibilities which include planning, coordinating, and managing care of consumers within a health care system. Students will learn to use evidence-based pathways in making decisions, planning care and finding the best ways to deliver safe, quality and culturally appropriate care and controlling increasing health care costs. Identify innovative technologies to measure case management effectiveness and outcomes.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing.

**NURS 450 - Health Care Informatics Internship**

Provides opportunity to apply theory and develop competencies in health care informatics through a work-related experience in an appropriate health related enterprise.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

**NURS 451 - Internship in Correctional Nursing**

Provides opportunity to apply theory and develop competencies in correctional nursing through a work-related experience in an appropriate correctional institution.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

**NURS 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

**NURS 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

**NURS 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

## Nursing, Bachelor of Science in Nursing (BSN) (RN-BSN)

The Bachelor of Science in Nursing program is a fully CCNE accredited Online Degree Completion Program for nurses, who already hold RN licensure. In the program, students develop critical thinking skills for clinical decision-making, prepare to collaborate in multidisciplinary work, shift focus from care of individuals within a community to the health of a community, refine professional communication, and develop leadership skills. The curriculum provides a strong foundation for professional development in a nursing career and the opportunity to gain the knowledge and skills needed for advancement in clinical ladder programs. Students also develop the team skills and technological ability to provide leadership in managed care environments.

This program meets the requirements for certification in Pennsylvania. As regulations vary by state, please check the licensing board in your state.

## ADMISSION REQUIREMENTS

- completion of a pre-licensure nursing program (RN diploma or associate degree)
- active unrestricted Registered Nurse license
- a 2.0 GPA in previous academic work

## PROGRAM LEARNING OUTCOMES

- Uses effective communication in formal and informal interactions with individuals and group including clients, families, and communities.
- Applies critical thinking process to professional nursing practice.
- Synthesizes knowledge from nursing, scientific, and humanistic disciplines to guide nursing practice.
- Uses the nursing process to promote, maintain, and restore health for individuals, families, and groups within communities.
- Participates with others in providing high quality, cost-effective care and in promoting the health and well-being of individuals, families, and groups within communities.
- Applies research findings to improve and refine nursing practice.
- Evaluates nursing practice in relation to professional/legal standards, ethical principles, and sensitivity to the cultural differences of clients.
- Exercises leadership for the evaluation and enhancement of the quality and effectiveness of nursing practice.
- Values continuing personal and professional development.

## RELATED LINKS

Nursing, BSN, RN-BSN Program Page (<https://www.sru.edu/academics/majors-and-minors/nursing-rn-bsn/>)

Nursing Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/nursing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	45
	Major Requirements	30
	RN Licensure	30
	Electives	15

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### ROCK STUDIES 2 REQUIREMENTS

BSN Students must complete a sum total of 45 SRU Rock Studies 2-based credits. There are no specific requirements.

### MAJOR REQUIREMENTS

Code	Title	Hours
<b>Required Supportive Coursework</b>		
PHIL 325	Medical/Health Care Ethics	3
INDP 317	Statistics for the Social Sciences	3
	Subtotal	6
<b>Required Nursing Courses <sup>1</sup></b>		
NURS 311	Introduction to Health Care Informatics	3

NURS 312	Nursing in Transition	3
NURS 327	Group Process for Nursing	3
NURS 331	Evidence Based Health Assessment and Promotion	3
NURS 422	Nursing Research & Evidence-Based Practice	3
NURS 426	Community and Public Health Nursing	3
NURS 434	Leadership and Management in Nursing with Practice Experience	3
	Subtotal	21
<b>Nursing Electives <sup>1</sup></b>		
Select 3 credits from the following:		3
NURS 322	The Teaching-Learning Process in Nursing	
NURS 395	Workshop	
NURS 406	Politics and Policy Nursing	
NURS 408	Delivery of Nursing Care in a Managed Care Environment/Clinical	
NURS 429	Financial Management for Nursing Case Managers	
NURS 430	Leadership in Nursing and Healthcare Systems	
NURS 433	Innovative Technology for Healthy Communities	
NURS 440	Nursing Case Management in Today's Healthcare Environment	
NURS 498	Selected Topics	
NURS 500	Developing Transcultural Awareness Among Health Professionals	
NURS 510	Cardiovascular Function: Assessment and Treatment	
NURS 511	Advanced Healthcare Informatics	
NURS 514	Bioterrorism and Disaster Management: The Nurse's Role	
NURS 516	Nursing for Palliative and End-of-Life Issues	
NURS 517	Social Media and Healthcare	
NURS 595	Workshop	
<b>Total Hours</b>		<b>30</b>

<sup>1</sup> Must earn a "C" or better

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### RN AND ELECTIVE REQUIREMENTS

Diploma Nurse RNs are awarded a block of 30 credits for their nursing coursework. Associate Degree RNs will find their Nursing coursework delineated as a total number of Electives.

Code	Title	Hours
<b>Required</b>		
NURS 199	RN Completion (Current Licensure as an RN)	0-30

### CO-CURRICULAR AND EXPERIENTIAL LEARNING

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student

success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Job Shadowing
5. Career Education Services

RN to BSN PROGRAM - BS (6 58)

This program is effective as of Fall 2020.

Revised 07.27.2021

UCC 09.01.2020

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

## Psychology

Chair	Secretary	Location	Department Phone
Dr. Jennifer Sanftner McGraw	Patricia Kingerski	309 Vincent Science Center	724-738-2077

Department Web Site URL (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/psychology/>)

Department Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/psych-fs.pdf>)

## Faculty

### Elizabeth Boerger

Assistant Professor

Psychology

Ph.D., University of Texas at Austin

M.S., University of Pittsburgh

M.A., University of Texas at Austin

B.A., Grinnell College

### Christina Esposito

Instructor

Psychology

### Emily Keener

Associate Professor

Psychology

Ph.D., West Virginia University

M.A., Radford University

B.A., Wheeling Jesuit University

### Catherine Massey

Professor

Psychology

Ph.D., West Virginia University

M.A., West Virginia University

B.S., University of Central Florida in Orlando

### Jennifer Sanftner McGraw

Professor

Psychology

Ph.D., Kent State University

M.A., Kent State University

B.A., George Mason University

### Patric Plesa

Instructor

Psychology

Ph.D., York University

M.A., York University

B.A., York University

### Beth Ann Rice

Assistant Professor

Psychology

M.A., University of Kentucky

B.S., Indiana University Southeast

### Ann Romanczyk

Assistant Professor

Psychology

Ph.D., De Paul University

M.A., De Paul University

B.S., State University of New York at Oswego

### Benjamin White

Instructor

Psychology

M.A., Brandeis University

B.A., Brandeis University

### Jennifer Willford

Professor

Psychology

Ph.D., University of Kentucky

M.S., University of Kentucky

B.S., Muskingum College

## PROGRAMS

### MAJORS

- Psychology, Bachelor of Arts (BA) (p. 671)
- Psychology, Bachelor of Science (BS) (p. 674)
- Psychology, Bachelor of Science (BS) - Concentration in Developmental (p. 677)
- Psychology, Bachelor of Science (BS) - Concentration in Neuroscience (p. 681)
- Psychology, Bachelor of Science (BS) - Concentration in Neuroscience / Pre-Physician Assistant (SRU) (Traditional) (p. 684)
- Psychology, Bachelor of Science (BS) / Counseling Psychology w/ Chatham University (MSCP), Accelerated (p. 688)
- Psychology, Bachelor of Science (BS) / Pre-Counseling (SRU) (3+3) (p. 691)
- Psychology, Bachelor of Science (BS) / Pre-Occupational Therapy (SRU) (3+3) (p. 694)

- Psychology, Bachelor of Science (BS) / Pre-Occupational Therapy (SRU) (Traditional) (p. 697)
- Psychology, Bachelor of Science (BS) / Pre-Physician Assistant (SRU) (3+2) (p. 701)
- Psychology, Bachelor of Science (BS) / Pre-Student Affairs (SRU) (3+2) (p. 705)
- Psychology, Bachelor of Science (BS) / Psychology w/ Chatham University (MAP), Accelerated (p. 708)

## MINORS

- Psychology, Minor (p. 711)

## Courses

### PSYC 105 - Introduction to Psychology

This course serves as an introduction to the science of psychology. Psychological theory, concepts, and research spanning the breadth of the discipline are explored. Content will provide an introduction to research methods and ethics and include selected topics from each of the five domains of psychological inquiry: Biological, Cognitive, Developmental, Social and Personality, and Mental and Physical Health. Students will explore questions involving four themes that arise across the domains: Cultural and Social Diversity, Ethics, Variations in Human Functioning, and Applications. A grade of C or higher is required to remain in the major. Students may only repeat this course one time.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

### PSYC 139 - Foundations of Academic Discovery

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

### PSYC 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

### PSYC 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

### PSYC 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

### PSYC 205 - Environmental Psychology

Man's interference with the environment, including over-population, isolation, social institutions as environments, noise, housing, community design, behavioral effects of pollutants and behavior genetics.

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

### PSYC 208 - Personality

Review of the major historical and contemporary theoretical approaches to the study of personality, including their antecedents, underlying assumptions, research/evidential basis, influence on the field and relevance to the theory and practice of psychology.

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course

### PSYC 221 - Introduction to Behavioral Statistics

Introduction to descriptive and inferential statistics used in evaluation and reporting of behavioral research.

Prerequisites: PSYC 105<sup>C</sup> and (MATH 152<sup>C</sup> or STAT 152<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Enrollment is limited to students with a program in Psychology, Psychology, Psychology-Developmental, Psychology-Neuroscience or Psychology-Pre PA-SRU 3+2.

### PSYC 231 - Psychological Science I: Research Methods

This project-based course introduces students to research methods and designs used in psychology. The course prepares students to evaluate published reports of psychological research and to design and conduct research studies in Psychology. Each student will apply concepts learned in a class to design and write a formal research proposal of an original experiment, which will be written in APA style.

Prerequisites: PSYC 105<sup>C</sup> and (MATH 152<sup>C</sup> or STAT 152<sup>C</sup>) and ENGL 102<sup>C</sup> and (INDS 110<sup>C</sup> or LIBR 110<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment is limited to students with a program in Psychology, Psychology, Psychology-Developmental or Psychology-Neuroscience.

**PSYC 232 - Psychological Science II: Statistical Applications**

This is a project-based course in which students apply knowledge of descriptive and inferential statistics to answer research questions in psychology. Topics include selection of appropriate descriptive and inferential statistics to use with descriptive, correlational, predictive, and experimental designs; planning statistical analysis; using statistical software to organize data and conduct analyses; interpreting results, and writing formal reports of research in APA style. Students will apply knowledge and skills learned in the course to write an APA style lab report of a quantitative study.

Prerequisites: PSYC 105<sup>C</sup> and ENGL 102<sup>C</sup> and (MATH 152<sup>C</sup> or STAT 152<sup>C</sup>) and (INDS 110<sup>C</sup> or LIBR 110) and PSYC 231<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Requires minimum grade of .

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment is limited to students with a program in Psychology, Psychology, Psychology-Developmental or Psychology-Neuroscience.

**PSYC 233 - Sensation & Perception**

This combined lecture and lab covers the basic anatomy, physiology and role of the sensory systems in perception and sensation.

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

**PSYC 240 - Human Sexual Behavior**

Examines personal sociocultural factors in sexual functioning. Motivational, developmental, personality and clinical implications are explored.

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Cultural Literacy & Community Building, Institutions & Human Innovations, Transfer Thread Completion Course

**PSYC 244 - Developmental Psychology**

Human development from conception to senescence with emphasis on the theoretical and practical implications.

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**PSYC 276 - Introduction to Abnormal Psychology**

Introduction to the field of abnormal behavior, including DSM classification and examination of major categories of mental disorders.

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Transfer Thread Completion Course

**PSYC 289 - Positive Psychology**

In this course, students will explore human flourishing - defined as a life of deep meaning, fulfillment and service to others. Students will be taught about human flourishing through the lens of science and their own experience. Through exposure to diverse scientific theories and research on the skills associated with flourishing and to a variety of reflective and applied practice, and laboratory experiences, students will develop conceptual knowledge, experiential insight, and practical skills related to living a "good life".

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Cultural Literacy & Community Building, Transfer Thread Completion Course

**PSYC 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PSYC 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**PSYC 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PSYC 300 - Psychology of Women, Gender and Culture**

Overview of psychological perspectives and current research concerning the field of the psychology of women and gender. Topics related to the role of culture in the social construction of gender will be emphasized. Topics include similarities and differences between women and men, gender development, emotions, relationships, sexuality, education and work, health and fitness, psychological distress, and social roles. CAPP Prerequisites: A grade of C or higher in PSYC 105 or any gender studies course or permission from the instructor.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**PSYC 302 - Psychology of Criminal Behavior**

The study of how individual criminal behavior is acquired, evoked, maintained and modified.

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 303 - Learning**

This lecture/lab course will facilitate a deeper understanding of the basic mechanisms of learning, which are expressed as changes in behavior that are altered by experience.

Prerequisite: PSYC 231<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 4

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 304 - Theories of Counseling**

This course will examine the major approaches to psychotherapy through critical review of the theoretical assumptions, historical influences, process and outcome research, techniques of intervention and relevant context for the major theoretical paradigms. Professional and ethical issues, contemporary topics and issues of fundamental conceptualization skill development will be addressed. This course does not prepare students to function as counselors; rather it is designed to provide meaningful preparation for pursuit of post-Baccalaureate training.

Prerequisites: PSYC 208<sup>D</sup> and PSYC 276<sup>D</sup> and PSYC 105<sup>C</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 306 - Introduction to Psychological Testing**

Includes the historical, theoretical and statistical foundations of testing; exposure to ability (aptitude, achievement and intelligence) and personality tests; and the settings in which psychologists administer these tests.

Prerequisites: PSYC 105<sup>C</sup> and (PSYC 221<sup>C</sup> or PSYC 232<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 310 - Introduction to Industrial-Organizational Psychology**

The application of psychological theory, techniques, and research to business, industry, and other organizational behavior. Subjects include employee recruitment and selection, retention and promotion; job satisfaction; job evaluation/performance measures; training; motivation; stress; and human factors.

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 311 - Introduction to Behavioral Neuroscience**

This lecture/lab course will help you to develop knowledge of the biological basis of human behavior and learn to design and conduct research to study brain structure, function, and behavior. Topics may include neuroanatomy, neural communication, development of the nervous system, genetics, sensory and motor systems, emotion, learning and memory, language, sexual behavior, consciousness and neurological and psychological disorders.

Prerequisite: PSYC 232<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 4

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with department of Psychology.

**PSYC 315 - Psychology of Sexual and Gender Diversity**

Overview of psychological perspectives and current research concerning the field of lesbian, gay, bisexual, transgender and queer psychology.

The course takes a life-span developmental perspective and examines the diversity of gender and sexual identities. Topics include theories of sexual orientation and gender identity, oppression and discrimination, history of the Queer community and the coming out process. CAPP

Prerequisites: A grade of C or higher in PSYC 105 or any gender studies course or permission from the instructor.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 318 - Psychopathology of Childhood and Adolescence**

An overview of clinical practice with children, adolescents and their families with advanced study of the emergence, diagnosis and treatment of psychological disorders in children and adolescents. Coursework includes theories of normal and abnormal child development, etiology of disorders, current DSM diagnosis, and an overview of assessment and intervention methods relevant to children and adolescents.

Prerequisites: PSYC 105<sup>C</sup> and PSYC 276<sup>D</sup> and PSYC 244<sup>D</sup>

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 320 - Introduction to Clinical Psychology**

Introduction to the field of clinical psychology. Includes an overview of training, similarities, and differences among various mental health service providers. Students will be introduced to interviewing skills, approaches to psychotherapy, assessment, treatment planning, and areas of specialization and application within the field. Emphasis is placed on consideration of issues that tend to arise when working with individuals from diverse backgrounds, including differences in racial and ethnic background, sex and gender, age, sexual orientation, religious background, and those with mental and physical disabilities.

Prerequisites: PSYC 105<sup>C</sup> and (PSYC 221<sup>C</sup> or PSYC 232<sup>C</sup>) and (PSYC 325<sup>C</sup> and PSYC 326<sup>C</sup> or PSYC 231<sup>C</sup>) and PSYC 276<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 321 - Drugs and Behavior**

Psychoactive drugs and their action on the human nervous system; legal and sociocultural aspects of drug abuse.

Prerequisite: PSYC 105<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Psychology, Psychology, Psychology-Developmental, Psychology-Neuroscience or Psychology-Pre PA-SRU 3+2.

**PSYC 325 - Introduction to Experimental Psychology**

This course will teach students how to design, conduct, and report psychological research. Topics include the nature of science, formulation of hypotheses, research methods and design, and ethical issues in using human and nonhuman subjects. Emphasis will be given to experimental design techniques, evaluation of published research in psychology, and the writing of research reports. The course will also focus on the teaching of library research skills and producing formal research reports in APA manuscript style

Prerequisites: INDS 110<sup>D</sup> and ENGL 102<sup>C</sup> and PSYC 105<sup>C</sup> and PSYC 221<sup>C</sup>  
<sup>D</sup> Requires minimum grade of D.  
<sup>C</sup> Requires minimum grade of C.

Corequisite(s): PSYC 326

Credits: 3

Students with a semester level of Freshman 1 or Freshman 2 may **not** enroll.

Enrollment is limited to students with a program in Psychology, Psychology, Psychology-Developmental, Psychology-Neuroscience or Psychology-Pre PA-SRU 3+2.

**PSYC 326 - Experimental Psychology Laboratory**

A laboratory experience to accompany PSYC 325 in which students will conduct a series of literature searches, design and execute laboratory experiments, perform and interpret statistical analyses of data collected, and report experimental findings in APA style.

Prerequisites: PSYC 105<sup>C</sup> and PSYC 221<sup>C</sup> and INDS 110<sup>D</sup> and ENGL 102<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): PSYC 325

Credits: 1

Students with a semester level of Freshman 1 or Freshman 2 may **not** enroll.

Enrollment is limited to students with a program in Psychology, Psychology, Psychology-Developmental, Psychology-Neuroscience or Psychology-Pre PA-SRU 3+2.

**PSYC 334 - Health Psychology**

An overview of the field and of the role of psychology in health. Topics include health-enhancing and health-compromising behaviors; the effects of stress, coping, and personality on health; psychoneuroimmunology; treatments of specific problems and disorders; and interacting with health care services.

Prerequisite: PSYC 105<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 338 - Cognitive Psychology**

A survey of theories and facts related to complex information processing and conscious experience in humans. Topics covered will include attention, memory, problem solving, symbolic processes and human consciousness.

Prerequisite: PSYC 105<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 350 - Contemporary Topics in Psychological Science**

Contemporary topics in Psychology are critically examined. Specific topics will vary within the major subfields of Psychology: Clinical/Counseling; Cognitive; Developmental; Environmental; Experimental/Quantitative; Forensic; Gender/Sexual Identity; Health; Industrial-Organizational; Multicultural; Neuroscience; Positive; Rehabilitation; Social; Sport/Performance.

Prerequisite: PSYC 105<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Psychology.

**PSYC 355 - Topical Seminar in Neuroscience**

Topical Seminar in Neuroscience will focus on reading, evaluating, and presenting primary literature. This course will provide students with an opportunity to read and discuss primary literature related to Neuroscience. Through reading and discussing primary literature students in this course will explore a breadth of career paths and neuroscience techniques while developing methodological and content knowledge in the foundations of neuroscience, and will gain skills in the ability to critically evaluate primary literature. Students may repeat the course once for credit.

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 360 - History of Psychology**

A review of the philosophical and natural science antecedents to the science of psychology and the development of psychological paradigms from our origins to the present, including attention to the interactive influence of world events/psychology. The historical perspective allows students to understand the relationships between different fields in psychology.

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**PSYC 364 - Child and Adolescent Development**

Intensive study of the biosocial, cognitive, and psychosocial aspects of development of children and adolescents.

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Cultural Literacy & Community Building, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 365 - Psychology of Aging**

Psychosocial, clinical and developmental aspects of aging, implications of optimal developmental and effective management of problems confronting the aged.

Prerequisites: PSYC 105<sup>C</sup> and (PSYC 325<sup>C</sup> and PSYC 326<sup>C</sup>) or (PSYC 232<sup>C</sup> and PSYC 231<sup>C</sup>) and (PSYC 344<sup>C</sup> or PSYC 244<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 375 - Psychopathology of Adulthood**

Advanced study of adult mental disorders, including symptoms, phenomenological aspects, diagnosis, and treatment. Students will examine the etiology, symptom constellations, and treatment of psychological disorders in depth and begin to understand what people with the disorders experience through various stages of adulthood. Psychological theory and research findings will guide the student in gaining an understanding of mental illness.

Prerequisites: PSYC 105<sup>C</sup> and PSYC 244<sup>D</sup> and PSYC 276<sup>D</sup>

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Psychology, Psychology, Psychology-Developmental or Psychology-Neuroscience.

**PSYC 377 - Social Psychology**

The psychological implications of our social existence; a study of the social forces affecting human behavior.

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 392 - Cross Cultural Psychology**

This course will introduce and familiarize students with the concept of cross-cultural psychology by examining the extent to which the theories, principles, and knowledge of the discipline of psychology are universally applicable to humans. The goal of exploring the psychological implications of cultural differences and of contact among members of different cultures is to consider the role which psychological research and theory can play in advancing intercultural understanding.

Prerequisites: PSYC 105<sup>C</sup> and PSYC 377<sup>D</sup>

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 415 - Multicultural Identity Development**

This course examines biological, psychological and social influences on identity formation through the lifespan with a focus on intersectionality of identities such as race, gender, sexual orientation, class and disability.

Prerequisites: PSYC 105<sup>C</sup> and (PSYC 344<sup>C</sup> or PSYC 244<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 420 - Community Service Practicum in Psychology**

160 hours of documented, relevant volunteer placement in an approved public, not for profit, or private agency. A formal paper related to the experience is required to assist the student with meaningful integration of the experience. Notes: Course grading: Pass/No Credit. Prerequisites: Declared major; Jr/Sr standing; minimum 2.5 GPA in major, 2.0 GPA overall; a grade of C or higher in PSYC 105, PSYC 231, and PSYC 232; at least 12 additional credits in Psychology; written application and departmental permission.

Prerequisites: PSYC 105<sup>C</sup> and PSYC 232<sup>C</sup> and PSYC 231<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**PSYC 421 - Advanced Behavioral Statistics**

Intermediate forms of statistical analysis of behavioral research, their rationale, and computer applications are introduced.

Prerequisites: PSYC 105<sup>C</sup> and PSYC 221<sup>C</sup> and PSYC 325<sup>C</sup> and PSYC 326<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 428 - Social and Emotional Development Across the Lifespan**

This course uses a lifespan theoretical perspective to examine social and emotional influences on social relationships (e.g., parent-child, sibling, grandparent-grandchild, romantic) with an emphasis on the socio-historical context and the influence of intersecting identity factors (e.g., age and race).

Prerequisites: PSYC 105<sup>C</sup> and (PSYC 244<sup>C</sup> or PSYC 344<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Psychology, Psychology, Psychology-Developmental or Psychology-Neuroscience.

**PSYC 430 - Research Practicum in Psychology**

Supervised research experience with Psychology department faculty member. Students identify a mentor and work together with their mentor to develop and implement a research plan, and write an APA style paper reporting the results. Notes: Course grading: Pass/No Credit. Prerequisites: Declared major; Jr/Sr standing; minimum overall and Psychology GPA of 3.0; a grade of C or higher in PSYC 105, PSYC 231 and PSYC 232; at least 12 additional credits in Psychology; written application and departmental permission.

Prerequisites: PSYC 105<sup>C</sup> and PSYC 232<sup>C</sup> and PSYC 231<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**PSYC 445 - Infant and Child Cognition**

This course examines theories and research in cognitive development with an emphasis on infancy and early childhood. Piagetian, Vygotskian, Information-processing, and Dynamic Systems Approaches are explored while examining the development of processes including attention, perception, memory, language, and reasoning. In addition to learning about theories and research findings in the field, students will (1) become familiar with the research methods employed by psychologists to study cognitive development; (2) think critically about current cognitive developmental questions; and (3) apply cognitive developmental findings to real world contexts.

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 449 - Seminar in Psychology**

Advanced topics will be announced in the schedule.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 450 - Field Placement Internship in Psychology**

Supervised placement in selected public and private agencies at appropriate institutions. Students are required to co-register for Senior Integration Seminar (PSYC 485) in order to synthesize the experience. Notes: Course grading: Pass/No Credit. Prerequisites: Declared major; Jr/Sr standing; minimum Overall GPA of 2.0 and Psychology GPA of 2.5; a grade of C or higher in PSYC 105, PSYC 231; and PSYC 232; at least 15 additional credits in Psychology; written application and departmental permission. Corequisite: PSYC 485.

Prerequisites: PSYC 105<sup>C</sup> and PSYC 232<sup>C</sup> and PSYC 231<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Corequisite(s): PSYC 485

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

Enrollment limited to students with department of Psychology.

**PSYC 451 - Research Capstone Internship**

This course is designed to provide an immersion experience in undergraduate research in laboratory or clinical settings. Under supervision of a SRU psychology faculty member, the student will integrate concepts gleaned from prerequisite undergraduate courses and scientific knowledge. Psychology theory, research methods, and statistical applications will be applied to prepare students who are planning to pursue careers in research in psychology related fields or to further their education in graduate programs in all psychology related fields, neuroscience, and professional programs such as physician assistant, occupational therapy, and medical schools. Notes: Declared major; Jr/Sr standing; minimum Overall GPA of 2.0 and Psychology GPA of 3.0; a grade of C or higher in: PSYC 105 and (PSYC 231 or (PSYC 325 and PSYC 326)) and (PSYC 232 or PSYC 221); written application and departmental permission. (repeatable up to 12 credits)

Prerequisites: PSYC 105<sup>C</sup> and (PSYC 231<sup>C</sup> or (PSYC 325<sup>C</sup> and PSYC 326<sup>C</sup>)) and (PSYC 232<sup>C</sup> or PSYC 221<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3-6

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

Enrollment is limited to students with a program in Psychology-Developmental or Psychology-Neuroscience.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**PSYC 471 - Psychopharmacology**

This combined lecture and laboratory course will provide a basic introduction to psychopharmacology: the study of the effects of drugs on the brain and human behavior. Emphasis will be on drugs that effect the central nervous system and treat mental health disorders.

Prerequisite: PSYC 311<sup>B</sup>

<sup>B</sup> Requires minimum grade of B.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 473 - Hormones and Behavior**

This combined lecture and laboratory course will provide an in-depth exploration of the study of hormones and behavior, introduce students to methodologies used to study hormones and behavior, and explore the evolutionary, behavioral and social influences that can change the expression of hormones and the resulting behavioral consequences.

Prerequisite: PSYC 311<sup>B</sup>

<sup>B</sup> Requires minimum grade of B.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 475 - Behavior Modification**

Application of learning and other psychological principles in behavior therapy.

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 476 - Clinical Neuroscience**

This course surveys the role of neural mechanisms on the development, diagnosis and treatment of psychological disorders. The biological basis of neurological and psychiatric disorders will be explored using integrative approach that includes genetics, neuroanatomy, chemistry and physiology, development, environment, behavior, culture and evolution.

Prerequisites: PSYC 276<sup>C</sup> and (PSYC 325<sup>C</sup> and PSYC 326<sup>C</sup>) or (PSYC 231<sup>C</sup> and PSYC 232<sup>C</sup>) and PSYC 311<sup>B</sup> and PSYC 312<sup>B</sup>

<sup>C</sup> Requires minimum grade of C.

<sup>B</sup> Requires minimum grade of B.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with department of Psychology.

**PSYC 477 - Developmental Neuroscience**

This course explores the biology of behavioral development and the integration of organismic and environmental process that regulate the development of the brain and behavior. Topics will include phases of ontogeny including prenatal, perinatal, early childhood, adolescent, adult and aging brain development, sensitive and critical periods, the role of environment, genetics and child-parent interactions on brain development and implications of neuroscience research on assessment and intervention.

Prerequisites: PSYC 276<sup>C</sup> and (PSYC 325<sup>C</sup> and PSYC 326<sup>C</sup>) or (PSYC 231<sup>C</sup> and PSYC 232<sup>C</sup>) and (PSYC 344<sup>C</sup> or PSYC 244<sup>C</sup>) and PSYC 311<sup>B</sup>

<sup>C</sup> Requires minimum grade of C.

<sup>B</sup> Requires minimum grade of B.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with department of Psychology.

**PSYC 480 - Behavior Management**

Principles, methods and ethics of behavior management in community, industrial and/or congregate facilities.

Prerequisites: PSYC 105<sup>C</sup> and PSYC 303<sup>D</sup>

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**PSYC 485 - Senior Integration Seminar**

This course integrates knowledge and skills acquired through the psychology curriculum and during the Field Placement Internship in Psychology with didactic experiences that facilitate learning and synthesis of information. Students are required to be co-enrolled with Field Placement Internship in Psychology (PSYC 450).

Prerequisites: PSYC 105<sup>C</sup> and (PSYC 221<sup>C</sup> or PSYC 232<sup>C</sup>) and (PSYC 325<sup>C</sup> and PSYC 326<sup>C</sup> or PSYC 231<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment is limited to students with a program in Psychology, Psychology, Psychology-Developmental, Psychology-Neuroscience or Psychology-Pre PA-SRU 3+2.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**PSYC 490 - Independent Study**

Propose and complete a supervised project, either historical, theoretical or experimental. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Psychology, Bachelor of Arts (BA)

Students are required to maintain a minimum Psychology GPA of 2.0 in order to retain a declared major. Students are required to earn a grade of C or higher in Introduction to Psychology (PSYC 105) in order to take all other Psychology courses. Students are required to earn a grade of C or higher in Psychological Science I: Research Methods (PSYC 231) and Psychological Science II: Statistical Applications (PSYC 232) in order to progress in the program. Each course can only be repeated once.

## PROGRAM LEARNING OUTCOMES

- **Theory and Content of Psychology:** Students should be familiar with the major theoretical approaches, findings, and historical trends in psychology.
- **Methodology:** Students should understand and be able to use major research methods in psychology, including design, data analysis, and interpretation.
- **Critical Thinking, Logic, and Problem-Solving:** Students should use and respect skeptical inquiry, critical thinking, and the scientific approach to understanding behavior.
- **Information Competence, Technology, and Computers:** Students should demonstrate information competence and the ability to use computers and other technology for multiple purposes.
- **Communication Skills:** Students should be able to express themselves effectively in written and oral communication.
- **Application of Psychology:** Students should have an understanding of applications of psychology to personal, social, and organizational issues.

## RELATED LINKS

Psychology, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/psychology/>)

Psychology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/psychology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Modern Language Requirement	0-9
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	36-40
	Electives	42

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	

PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
Complete 0-9 credits		0-9
<b>Total Hours</b>		<b>0-9</b>

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	

CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## MAJOR REQUIREMENTS

- 18 major credits must be taken at SRU or PASSHE
- 18 major credits must be taken at the 300 level or above
- Students who do not meet minimum standards will be dismissed from the program. All dismissals are permanent.

Code	Title	Hours
<b>Required Courses (Grade of 'C' or higher required) <sup>1</sup></b>		
Required Courses may only be repeated once.		
PSYC 105	Introduction to Psychology	3
PSYC 231	Psychological Science I: Research Methods	3
PSYC 232	Psychological Science II: Statistical Applications	3
Subtotal		9
<b>Core Electives <sup>1</sup></b>		
Select five of the following:		15-17
PSYC 244	Developmental Psychology	
PSYC 276	Introduction to Abnormal Psychology	
PSYC 303	Learning	
or PSYC 475	Behavior Modification	
PSYC 306	Introduction to Psychological Testing	
PSYC 311	Introduction to Behavioral Neuroscience	
PSYC 338	Cognitive Psychology	
PSYC 360	History of Psychology	
PSYC 377	Social Psychology	
Subtotal		15-17
<b>Psychology Electives <sup>1</sup></b>		
Select four electives from the following:		12-14
Psychology Electives (p. 672)		
<b>Total Hours</b>		<b>36-40</b>

<sup>1</sup> Courses count for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Psychology Electives<sup>1</sup>

Code	Title	Hours
PSYC 205	Environmental Psychology	3
PSYC 208	Personality	3
PSYC 233	Sensation & Perception	3
PSYC 240	Human Sexual Behavior	3
PSYC 244	Developmental Psychology	3
PSYC 276	Introduction to Abnormal Psychology	3

PSYC 289	Positive Psychology	3
PSYC 300	Psychology of Women, Gender and Culture	3
PSYC 302	Psychology of Criminal Behavior	3
PSYC 303	Learning	4
PSYC 304	Theories of Counseling	3
PSYC 306	Introduction to Psychological Testing	3
PSYC 310	Introduction to Industrial-Organizational Psychology	3
PSYC 311	Introduction to Behavioral Neuroscience	4
PSYC 315	Psychology of Sexual and Gender Diversity	3
PSYC 318	Psychopathology of Childhood and Adolescence	3
PSYC 320	Introduction to Clinical Psychology	3
PSYC 321	Drugs and Behavior	3
PSYC 334	Health Psychology	3
PSYC 338	Cognitive Psychology	3
PSYC 350	Contemporary Topics in Psychological Science <sup>2</sup>	1
PSYC 360	History of Psychology	3
PSYC 364	Child and Adolescent Development	3
PSYC 365	Psychology of Aging	3
PSYC 375	Psychopathology of Adulthood	3
PSYC 377	Social Psychology	3
PSYC 392	Cross Cultural Psychology	3
PSYC 415	Multicultural Identity Development	3
PSYC 428	Social and Emotional Development Across the Lifespan	3
PSYC 430	Research Practicum in Psychology	3
PSYC 445	Infant and Child Cognition	3
PSYC 449	Seminar in Psychology	3
PSYC 450 & PSYC 485	Field Placement Internship in Psychology and Senior Integration Seminar	9
PSYC 471	Psychopharmacology	3
PSYC 473	Hormones and Behavior	3
PSYC 475	Behavior Modification	3
PSYC 476	Clinical Neuroscience	3
PSYC 477	Developmental Neuroscience	3
PSYC 490	Independent Study	3

<sup>1</sup> Courses count for 50% of Major requirements and Major GPA

<sup>2</sup> Course may be repeated for a total of 2 credits

## ELECTIVES

Code	Title	Hours
LIBR 110	Introduction to Library & Information Resources (Required)	1

## WRITING COMPETENCY REQUIREMENTS

Code	Title	Hours
Writing in Psychology #1		
Writing in Psychology #2		
Writing in Psychology #3		
Writing in Psychology #4		

## CO-CURRICULAR AND EXPERIENTIAL LEARNING

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International Study Programs
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership (Psi Chi, Psychology Club, Reflections Body Image Organization, Nu Rho Psi, Neuro Rocks)
5. Service-learning classes
6. Career education planning (Office of Career Education and Development)
7. Internships
8. Volunteering in local human services and mental health agencies
9. Job shadowing Volunteering

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

PSYCHOLOGY - BA (6 70)

This program is effective as of Fall 2018

Revised 06.10.2022

UCC 03.01.2022

## RECOMMENDED FOUR-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
PSYC 105	Introduction to Psychology	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
STAT 152	Elementary Statistics I	3
	Creative and Aesthetic Inquiry Course	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
LIBR 110	Introduction to Library & Information Resources	1
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
PSYC 231	Psychological Science I: Research Methods	3
PSYC Core Elective #1		3
ENGL 104	Critical Reading	3
SCI 101	Science of Life	3
	Humanities Inquiry OR Social Science Inquiry (p. 29)	3
<b>Hours</b>		<b>15</b>

**Second Year****Fall**

PSYC 232	Psychological Science II: Statistical Applications	3
PSYC Core Elective #2		3
Civil Discourse Requirement - select one		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
SCI 102	Understanding the Physical World	3
Modern Language #1		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>

**Spring**

PSYC Core Elective #3		3
Humanities Inquiry OR Social Science Inquiry (p. 29)		3
Modern Language #2		3
Thematic Thread Requirement (p. 29)		3
Free Elective		3
<b>Hours</b>		<b>15</b>

**Third Year****Fall**

PSYC Core Elective #4		3
PSYC Elective #1		3
Thematic Thread Requirement (p. 29)		3
Modern Language #3		3
Free Elective		3
<b>Hours</b>		<b>15</b>

**Spring**

PSYC Core Elective #5		3
PSYC Elective #2		3
PSYC Elective #3		3
Thematic Thread Requirement (p. 29)		3
Free Elective		3
<b>Hours</b>		<b>15</b>

**Fourth Year****Fall**

PSYC Elective #4		3
Thematic Thread Requirement (p. 29)		3
Free Elective		3
Free Elective		3
Free Elective		3
<b>Hours</b>		<b>15</b>

**Spring**

Free Elective		3
Free Elective		3
Free Elective		3
Free Elective		3
Free Elective		1
<b>Hours</b>		<b>13</b>
<b>Total Hours**</b>		<b>120</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

Major Code: 6 70

Revised: 09.21.20

## Psychology, Bachelor of Science (BS)

Students are required to maintain a minimum Psychology GPA of 2.0 in order to retain a declared major. Students are required to earn a grade of C or higher in Introduction to Psychology (PSYC 105) in order to take all other Psychology courses. Students are required to earn a grade of C or higher in Psychological Science I: Research Methods (PSYC 231) and Psychological Science II: Statistical Applications (PSYC 232) in order to progress in the program. Each course can only be repeated once.

1. Knowledge Base in Psychology: Students should demonstrate fundamental knowledge and comprehension in the major concepts, theoretical perspectives, historical trends, and empirical findings to discuss how psychological principles are applied. (UG 2, 3)
2. Scientific Inquiry and Critical Thinking: The skills in this domain involve the development of scientific reasoning and problem solving, including effective research methods. (UG 2, 3, 4)
3. Ethical and Social Responsibility in a Diverse World: The skills in this domain involve the development of ethically and socially responsible behaviors for professional and personal settings in a landscape that involves increasing diversity. (UG 9)
4. Writing Competency: Students should demonstrate competence in writing skills. (UG 1)
5. Professional Development: The emphasis in this goal is on the application of psychology-specific content and skills, effective self-reflection, and career preparation. (UG 5, 7, 8)

## Related Links

Psychology, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/psychology/>)

Psychology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/psychology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

## Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	45-47
	Electives	32

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 23 major credits must be taken at SRU or PASSHE
- 23 major credits must be taken at the 300 level or above
- Students who do not meet minimum standards will be dismissed from the program. All dismissals are permanent

Code	Title	Hours
<b>Required Courses (Grades of 'C' or higher required) <sup>1</sup></b>		
Required Courses may only be repeated once.		
PSYC 105	Introduction to Psychology	3
PSYC 231	Psychological Science I: Research Methods	3
PSYC 232	Psychological Science II: Statistical Applications	3
Subtotal		9
<b>Core Electives <sup>1</sup></b>		
Select five of the following:		15-17
PSYC 244	Developmental Psychology	
PSYC 276	Introduction to Abnormal Psychology	
PSYC 303	Learning	
or PSYC 475	Behavior Modification	
PSYC 306	Introduction to Psychological Testing	
PSYC 311	Introduction to Behavioral Neuroscience	
PSYC 338	Cognitive Psychology	
PSYC 360	History of Psychology	
PSYC 377	Social Psychology	
Subtotal		15-17
<b>Psychology Electives <sup>1</sup></b>		
Select 12-14 credits from Psychology Electives <sup>1</sup>		12-14
Psychology Electives (p. 676)		



Subtotal	12-14
<b>Depth of Knowledge <sup>1</sup></b>	
Select one of the following options:	9
<b>Option 1</b>	
PSYC 450	Field Placement Internship in Psychology
PSYC 485	Senior Integration Seminar
<b>Option 2</b>	
PSYC 451	Research Capstone Internship (3 or 6 credits)
3 or 6 credits from (list all 300 and 400 level Psychology classes).	
<b>Option 3</b>	
Enhanced Coursework: Choose 9 credits of electives from (list all 300 and 400 level Psychology classes).	
<b>Total Hours</b>	<b>45-47</b>

- <sup>1</sup> Courses count for 50% of Major requirements and Major GPA
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Psychology Electives<sup>1</sup>

Code	Title	Hours
PSYC 205	Environmental Psychology	3
PSYC 208	Personality	3
PSYC 233	Sensation & Perception	3
PSYC 240	Human Sexual Behavior	3
PSYC 244	Developmental Psychology	3
PSYC 276	Introduction to Abnormal Psychology	3
PSYC 289	Positive Psychology	3
PSYC 300	Psychology of Women, Gender and Culture	3
PSYC 302	Psychology of Criminal Behavior	3
PSYC 303	Learning	4
PSYC 304	Theories of Counseling	3
PSYC 306	Introduction to Psychological Testing	3
PSYC 310	Introduction to Industrial-Organizational Psychology	3
PSYC 311	Introduction to Behavioral Neuroscience	4
PSYC 315	Psychology of Sexual and Gender Diversity	3
PSYC 318	Psychopathology of Childhood and Adolescence	3
PSYC 320	Introduction to Clinical Psychology	3
PSYC 321	Drugs and Behavior	3
PSYC 334	Health Psychology	3
PSYC 338	Cognitive Psychology	3
PSYC 350	Contemporary Topics in Psychological Science <sup>2</sup>	1
PSYC 360	History of Psychology	3
PSYC 364	Child and Adolescent Development	3
PSYC 365	Psychology of Aging	3
PSYC 375	Psychopathology of Adulthood	3
PSYC 377	Social Psychology	3
PSYC 392	Cross Cultural Psychology	3
PSYC 415	Multicultural Identity Development	3

PSYC 428	Social and Emotional Development Across the Lifespan	3
PSYC 445	Infant and Child Cognition	3
PSYC 449	Seminar in Psychology	3
PSYC 471	Psychopharmacology	3
PSYC 473	Hormones and Behavior	3
PSYC 475	Behavior Modification	3
PSYC 476	Clinical Neuroscience	3
PSYC 477	Developmental Neuroscience	3
PSYC 490	Independent Study	3

<sup>1</sup> Courses count for 50% of Major requirements and Major GPA

<sup>2</sup> Course may be repeated for a total of 2 credits

### Writing Competency Requirements

Code	Title	Hours
	Writing in Psychology #1	
	Writing in Psychology #2	
	Writing in Psychology #3	
	Professional Competencies Paper or Writing in Psychology #4	

### Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International Study Programs
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership (Psi Chi, Psychology Club, Reflections Body Image Organization, Nu Rho Psi, Neuro Rocks)
5. Service-learning classes
6. Career education planning (Office of Career Education and Development)
7. Internships
8. Volunteering in local human services and mental health agencies
9. Job shadowing

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

PSYCHOLOGY - BS (6170)

This program is effective as of Fall 2018

Revised 02.23.2023

UCC 01.31.2023

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
PSYC 105	Introduction to Psychology	3
ENGL 102	Critical Writing	3
STAT 152	Elementary Statistics I	3
Creative and Aesthetic Inquiry Course		3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
LIBR 110	Introduction to Library & Information Resources	1
ESAP 101	FYRST Seminar *	1
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
PSYC 231	Psychological Science I: Research Methods	3
PSYC Core Elective #1		3
ENGL 104	Critical Reading	3
SCI 101	Science of Life	3
Humanities or Social Science Inquiry Course		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
PSYC 232	Psychological Science II: Statistical Applications	3
PSYC Core Elective #2		3
Civil Discourse Requirement - select one		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
SCI 102	Understanding the Physical World	3
Free Elective		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
PSYC Core Elective #3		3
Thematic Thread Requirement		3
Humanities or Social Science Inquiry Course		3
Free Elective		3
Free Elective		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
PSYC Core Elective #4		3
PSYC Elective #1		3
Thematic Thread Requirement		3
Free Elective		3
Free Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
PSYC Core Elective #5		3
PSYC Elective #2		3
PSYC Elective #3		3

Thematic Thread Requirement		3
Free Elective		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
PSYC Elective #4		3
Thematic Thread Requirement		3
Free Elective		3
Free Elective		3
Free Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
PSYC 450	Field Placement Internship in Psychology	6
PSYC 485	Senior Integration Seminar (or Free Elective)	3
Free Elective		3
Free Elective		1
<b>Hours</b>		<b>13</b>
<b>Total Hours**</b>		<b>120</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6170

Revised 09.21.20

## Psychology, Bachelor of Science (BS) - Concentration in Developmental

Students are required to maintain minimum Overall and Psychology GPAs of 2.0 in order to retain the major in Psychology: Developmental Concentration. Students are required to earn a grade of C or higher in Introduction to Psychology (PSYC 105) in order to take all other Psychology courses. Students are required to earn a grade of C or higher in Psychological Science I: Research Methods (PSYC 231) and Psychological Science II: Statistical Applications (PSYC 232) in order to progress in the program. Each course can only be repeated once. Students in the Developmental Concentration are required to earn a grade of B or higher in Developmental Psychology (PSYC 244) to be prepared for advanced developmental psychology courses.

## Program Learning Outcomes

- Understand the biological, psychological, social, and cultural influences on human development.
- Understand, critically evaluate, and apply the major theories of human development.

- Understand and critically evaluate research findings and methods used to study human development.
- Understand the implications of research and theory in developmental psychology for the purpose of providing service to individuals across the lifespan.
- Provide the framework to understand and appreciate diversity within the context of life and society.

## Related Links

Psychology - Developmental, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/psychology-developmental/>)

Psychology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/psychology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	54-59
	Electives	24

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

#### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3

<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

### Major Requirements

- 28 major credits must be taken at SRU or PASSHE
- 28 major credits must be taken at the 300 level or above
- Overall, 48 credit hours must be completed at the 300 or 400 level
- Students who do not meet minimum standards will be dismissed from the program. All dismissals are permanent.

Code	Title	Hours
<b>Required Courses (Grade of 'C' or higher required) <sup>1</sup></b>		
Required Courses may only be repeated once.		

PSYC 105	Introduction to Psychology	3
PSYC 231	Psychological Science I: Research Methods	3
PSYC 232	Psychological Science II: Statistical Applications	3
PSYC 244	Developmental Psychology <sup>2</sup>	3
PSYC 276	Introduction to Abnormal Psychology	3
PSYC 364	Child and Adolescent Development <sup>3,4</sup>	3
or PSYC 365	Psychology of Aging	
PSYC 375	Psychopathology of Adulthood	3
or PSYC 318	Psychopathology of Childhood and Adolescence	
Subtotal		21
<b>Core Elective <sup>1</sup></b>		
Select three of the following:		9-11
PSYC 303	Learning	
or PSYC 475	Behavior Modification	
PSYC 311	Introduction to Behavioral Neuroscience	
PSYC 338	Cognitive Psychology	
PSYC 377	Social Psychology	
Subtotal		9-11
<b>Diversity Elective <sup>1</sup></b>		
Select one of the following:		3
PSYC 240	Human Sexual Behavior	
PSYC 300	Psychology of Women, Gender and Culture	
PSYC 315	Psychology of Sexual and Gender Diversity	
PSYC 392	Cross Cultural Psychology	
Subtotal		3
<b>Advanced Developmental Courses <sup>1</sup></b>		
Select three of the following:		9
PSYC 415	Multicultural Identity Development	
PSYC 428	Social and Emotional Development Across the Lifespan	
PSYC 445	Infant and Child Cognition	
PSYC 477	Developmental Neuroscience	
Subtotal		9
<b>Required Professional Competency <sup>1</sup></b>		
Select one of the following:		6-9
PSYC 450 & PSYC 485	Field Placement Internship in Psychology and Senior Integration Seminar	
PSYC 451	Research Capstone Internship (taken twice)	
Subtotal		6-9
<b>Psychology Elective <sup>1</sup></b>		
Select two from the following:		6
Psychology Electives (p. 679)		
<b>Total Hours</b>		<b>54-59</b>

<sup>1</sup> Courses count for 50% of Major requirements and Major GPA

<sup>2</sup> Must earn a Grade of B or higher

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Psychology Electives<sup>1</sup>

Code	Title	Hours
PSYC 205	Environmental Psychology	3
PSYC 208	Personality	3
PSYC 240	Human Sexual Behavior	3
PSYC 289	Positive Psychology	3
PSYC 300	Psychology of Women, Gender and Culture	3
PSYC 306	Introduction to Psychological Testing	3
PSYC 315	Psychology of Sexual and Gender Diversity	3
PSYC 318	Psychopathology of Childhood and Adolescence	3
PSYC 321	Drugs and Behavior	3
PSYC 334	Health Psychology	3
PSYC 360	History of Psychology	3
PSYC 364	Child and Adolescent Development	3
PSYC 365	Psychology of Aging	3
PSYC 375	Psychopathology of Adulthood	3
PSYC 392	Cross Cultural Psychology	3
PSYC 471	Psychopharmacology	3
PSYC 473	Hormones and Behavior	3
PSYC 476	Clinical Neuroscience	3

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

## Electives

Code	Title	Hours
PSYC 350	Contemporary Topics in Psychological Science (Course may be repeated for a total of 2 credits)	1

## Writing Competency Requirements

Code	Title	Hours
Writing in Psychology #1		
Writing in Psychology #2		
Writing in Psychology #3		
Professional Competencies Paper		

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International Study Programs
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership (Psi Chi, Psychology Club, Reflections Body Image Organization, Nu Rho Psi, Neuro Rocks)
5. Service-learning classes
6. Career education planning (Office of Career Education and Development)
7. Internships
8. Volunteering in local human services and mental health agencies
9. Job shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

PSYCHOLOGY - BS (6170)

Developmental (DEVE)

This program is effective as of Fall 2021

Revised 04.21.2022

UCC 02.15.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
PSYC 105	Introduction to Psychology	3
ENGL 102	Critical Writing	3
STAT 152	Elementary Statistics I	3
SCI 101	Science of Life	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
LIBR 110	Introduction to Library & Information Resources	1
ESAP 101	FIRST Seminar *	1
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
PSYC 231	Psychological Science I: Research Methods	3
PSYC 244	Developmental Psychology	3
ENGL 104	Critical Reading	3
Creative & Aesthetic Inquiry (p. 29)		3
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
PSYC 232	Psychological Science II: Statistical Applications	3
PSYC 276	Introduction to Abnormal Psychology	3
SCI 102	Understanding the Physical World	3
Thematic Thread Requirement (p. 29)		3
Select one of the following:		3
PSYC Elective		
PSYC Diversity Elective		
Declare a Thematic Thread <sup>3</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
PSYC Developmental Core Elective # 1		3
Civil Discourse Requirement - select one		3
COMM 200	Civil Discourse: Theory & Practice	

PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Social Science Inquiry Course or Free Elective		3
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
PSYC 364	Child and Adolescent Development	3
or PSYC 365	or Psychology of Aging	
PSYC Developmental Core Elective #2		3-4
PSYC Advanced Developmental Course #1		3
Thematic Thread Requirement or Computer Competency (if needed)		3
Select one of the following:		3
PSYC Elective		
PSYC Diversity Elective		
<b>Hours</b>		<b>15-16</b>
<b>Spring</b>		
PSYC 318	Psychopathology of Childhood and Adolescence	3
or PSYC 375	or Psychopathology of Adulthood	
PSYC Developmental Core Elective #3		3
PSYC Developmental Core Elective # 2		
PSYC Advanced Developmental Course #2		3
Free Elective or Thematic Thread Requirement (if needed)		3
Free Elective		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
PSYC Elective #2		3
PSYC Advanced Developmental Course #3		3
Free Elective		3
PSYC Professional Competency (or Free Elective)		3
PSYC 451	Research Capstone Internship	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Select One of the Following		3-9
PSYC 451 OR		
PSYC 450 AND PSYC 485		
Free Elective (If needed)		3
Free Elective (If needed)		3
Free Elective (If needed)		3
Free Elective (If needed)		3
<b>Hours</b>		<b>15-21</b>
<b>Total Hours**</b>		<b>122-129</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> If enrolled in PSYC 450

<sup>3</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.



**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6170

Concentration Code: DEVE

Revised: 04.21.22

## Psychology, Bachelor of Science (BS) - Concentration in Neuroscience

Neuroscience breakthroughs are responsible for advancements in memory, sleep science, understanding mental health, developing mental health treatments and so much more.

Neuroscience is an interdisciplinary degree with a wide range of career opportunities. Neuroscience graduates aren't confined to one career path, which makes for an exciting postgraduate experience. The Neuroscience concentration prepares students for graduate study in Neuroscience, medical school, careers in the pharmaceutical, biotech, and other industries, and much more.

At SRU, there are countless opportunities to network and get involved with other students on campus. Our Psychology Club allows you to meet faculty, students, and professionals in the field. We also feature our own chapter of Nu Rho Psi, an honor society for Neuroscience majors.

### Program Learning Outcomes

- Scientific Literacy & Research Foundations:** Learn scientific literacy and fundamental and organizing principles in psychology and neuroscience. a. UG 1, b. UG 3, c. UG 4
- Breadth of Knowledge & Making Connections:** Develop breadth of knowledge about neuroscience from multiple scientific perspectives and learn about the interdisciplinary nature of neuroscience by making connections between the disciplines. a. UG 1, b. UG 2, c. UG 3, d. UG 4
- Depth of Knowledge, Technical Expertise and Advanced Research:** Advance depth of knowledge in neuroscience related fields and independent research ability. a. UG 1, b. UG 3, c. UG 4

### Neuroscience Core Competencies:

- Independent and critical thinkers; self-motivated learners
- Basic knowledge in Neuroscience/Biology/Chemistry/Psychology
- Ability to think creatively and integratively
- Quantitative skills
- Scientific inquiry/analytical skills/research skills
- Communication skills

### Related Links

Psychology - Neuroscience, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/psychology-neuroscience/>)

Psychology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/psychology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	44
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	56-57
	Electives	19

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Physical &amp; Natural Sciences Inquiry</i>		
CHEM 107	General Chemistry I	4
& CHEM 111	and General Chemistry I Lab	
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>44</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
Total Hours		0-3

Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
Total Hours		0-3

DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

Major/Concentration Requirements

- 28 major credits must be taken at SRU or PASSHE
- 28 major credits must be taken at the 300 level or above
- Overall, 48 credit hours must be completed at the 300 or 400 level
- Students who do not meet minimum standards will be dismissed from the program. All dismissals are permanent.
- 

Code	Title	Hours
Goal 1: Scientific Literacy & Foundations <sup>1</sup>		
Must earn a grade of 'C' or higher in PSYC 105, PSYC 231, and PSYC 232.		
Must earn a grade of 'B' or higher in PSYC 311.		
PSYC 105	Introduction to Psychology	3
PSYC 231	Psychological Science I: Research Methods	3
PSYC 232	Psychological Science II: Statistical Applications	3
PSYC 311	Introduction to Behavioral Neuroscience	4
Subtotal		13

Goal 2: Depth of Knowledge & Making Connections <sup>1</sup>

Core Courses		
PSYC 244	Developmental Psychology	3
PSYC 276	Introduction to Abnormal Psychology	3
Neuroscience Content Courses (select two courses)		6-7
PSYC 233	Sensation & Perception	
PSYC 303	Learning	
PSYC 321	Drugs and Behavior	
PSYC 334	Health Psychology	
PSYC 338	Cognitive Psychology	
Interdisciplinary Core Courses		
BIOL 250	Genetics with Lab	4
CHEM 201	Organic Chemistry I	3
Subtotal		19-20

Goal 3: Depth of Knowledge, Technical Expertise & Research <sup>1</sup>

Neuroscience Content Courses (select three courses)		9
PSYC 471	Psychopharmacology	
PSYC 473	Hormones and Behavior	
PSYC 476	Clinical Neuroscience	
PSYC 477	Developmental Neuroscience	
Research Capstone		
Students must register for two semesters		
PSYC 451	Research Capstone Internship	6
PSYC 451	Research Capstone Internship	6
Interdisciplinary Electives		
Select one of the following:		3
BIOL 330	Microbiology/Lab	
BIOL 335	Cell Biology/Lab	
BIOL 370	Molecular Biology with Lab	
Subtotal		24
Total Hours		56-57

<sup>1</sup> Courses count for 50% of Major requirements and Major GPA  
\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

Electives

Code	Title	Hours
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
STAT 252	Introduction to Statistical Modeling	3
PSYC 355	Topical Seminar in Neuroscience	1

Writing Competency Requirements

Code	Title	Hours
Writing in Psychology #1		
Writing in Psychology #2		
Writing in Psychology #3		
Professional Competencies Paper		

Elective Recommendations based on Student Goals

Students can choose from many of the following recommended electives to fulfill their requirements for the interdisciplinary elective for the neuroscience

concentration and/or for their remaining credits after meeting their rock studies 2 and major requirements.

### Recommended Electives for Psychology (Biology Concentration)

Code	Title	Hours
BIOL 209		4
BIOL 309		4
BIOL 340	Vertebrate Anatomy with Lab <sup>1</sup>	3
BIOL 330	Microbiology/Lab <sup>2</sup>	3
BIOL 335	Cell Biology/Lab <sup>2</sup>	3
BIOL 325	Biometry with Lab	3
BIOL 370	Molecular Biology with Lab	3
BIOL 410	Animal Physiology with Lab <sup>3</sup>	3
BIOL 470	Histology with Lab <sup>4</sup>	3

<sup>1</sup> additional pre-requisite BIOL 212 General Zoology/Lab

<sup>2</sup> additional pre-requisite CHEM 201 Organic General Chemistry I

<sup>3</sup> additional pre-requisites include BIOL 212 General Zoology/Lab & CHEM 201 Organic Chemistry I

<sup>4</sup> additional pre-requisite includes BIOL 212 General Zoology/Lab

### Recommended Electives for Psychology (Chemistry Concentration)

Code	Title	Hours
CHEM 201 & CHEM 211	Organic Chemistry I and Organic Chemistry Laboratory I	4
CHEM 202 & CHEM 212	Organic Chemistry II and Organic Chemistry Laboratory II	4
CHEM 335 & CHEM 336	Biochemistry I and Biochemistry Laboratory I	4
CHEM 337 & CHEM 338	Biochemistry II and Biochemistry Laboratory II	4

### Recommended Electives for Psychology (Biostatistics Concentration)

Code	Title	Hours
HLTH 312	Data Management for Health Science	3
HLTH 313	Biostatistics	3
STAT 252	Introduction to Statistical Modeling	3
STAT 254	Nonparametric Statistics	3
STAT 256	Statistical Computing	3

### Recommended Electives for Pre-Professional Concentration (e.g., pre-med, pre-vet) Concentration

Code	Title	Hours
PHYS 201	Elements of Physics I with Lab	4
PHYS 202	Elements of Physics II/ Lab	4
CHEM 201 & CHEM 211	Organic Chemistry I and Organic Chemistry Laboratory I	4
CHEM 202 & CHEM 212	Organic Chemistry II and Organic Chemistry Laboratory II	4
CHEM 335 & CHEM 336	Biochemistry I and Biochemistry Laboratory I	4
CHEM 337 & CHEM 338	Biochemistry II and Biochemistry Laboratory II	4

### Recommended Electives for Physician Assistant Concentration

Code	Title	Hours
BIOL 209		4
BIOL 309		4
BIOL 330	Microbiology/Lab <sup>1</sup>	3
HCAM 250 or EXSC 250	Medical Terminology for Healthcare Administrators Medical Terminology	3

<sup>1</sup> Additional pre-requisite CHEM 201 Organic Chemistry I

### Additional Recommendations for Rock Studies 2 Courses

Code	Title	Hours
BIOL 300	Social and Ethical Issues in Genetics	3
CDEV 201	Interpersonal and Group Dynamics	3
COMM 314	Interpersonal Communication	3
INDP 201	Principles of Sociology	3
INDP 202	Introduction to Anthropology	3
PHIL 123	Ethics	3
PHIL 325	Medical/Health Care Ethics	3

### Co-Curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International Study Programs
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership (Psi Chi, Psychology Club, Reflections Body Image Organization, Nu Rho Psi, Neuro Rocks)
5. Service-learning classes
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7. Internships
8. Volunteering in local human services and mental health agencies
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### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

PSYCHOLOGY - BS (6170)

Concentration in Neuroscience (NEUR)

This program is effective as of Summer 2022

Revised 02.23.2023

UCC 01.31.2023

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
PSYC 105	Introduction to Psychology	3
ENGL 102	Critical Writing	3
STAT 152	Elementary Statistics I	3
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
LIBR 110	Introduction to Library & Information Resources	1
ESAP 101	FIRST Seminar *	1
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
PSYC 231	Psychological Science I: Research Methods	3
Creative & Aesthetic Inquiry (p. 29)		3
ENGL 104	Critical Reading	3
Civil Discourse Requirement - select one		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
PSYC 232	Psychological Science II: Statistical Applications	3
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
PSYC 276	Introduction to Abnormal Psychology	3
Humanities Inquiry (p. 29)		3
Free Elective (Neuro Recommended)		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
PSYC 311	Introduction to Behavioral Neuroscience	4
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
PSYC 244	Developmental Psychology	3
Free Elective (Neuro Recommended)		3
<b>Hours</b>		<b>14</b>
<b>Third Year</b>		
<b>Fall</b>		
Goal 2: Neuroscience Content Course #1		3
CHEM 201	Organic Chemistry I	3
Thematic Thread Requirement (p. 29)		3
Free Elective (Neuro Recommended)		3
Free Elective (Neuro Recommended)		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Goal 2: Neuroscience Content Course #2		3
Goal 3: Neuroscience Content Course #1		3

BIOL 250	Genetics with Lab	4
Thematic Thread Requirement (p. 29)		3
Free Elective (Neuro Recommended)		3
<b>Hours</b>		<b>16</b>
<b>Fourth Year</b>		
<b>Fall</b>		
PSYC 451	Research Capstone Internship	6
Goal 3: Neuroscience Content Course #2		3
Major Interdisciplinary Elective		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
PSYC 451	Research Capstone Internship	6
Goal 3: Psych Neuro Content Course #3		3
Free Elective (Neuro Recommended)		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6170

Concentration Code: NEUR

Revised: 05.25.2022

## Psychology, Bachelor of Science (BS) - Concentration in Neuroscience / Pre-Physician Assistant (SRU) (Traditional)

### Psychology Program Learning Outcomes

- Knowledge Base in Psychology:** Students should demonstrate fundamental knowledge and comprehension in the major concepts, theoretical perspectives, historical trends, and empirical findings to discuss how psychological principles are applied. a. UG 2: Apply critical thinking to argument and problem solving, b. UG 3: Develop Scientific Literacy
- Scientific Inquiry and Critical Thinking:** The skills in this domain involve the development of scientific reasoning and problem-solving, including effective research methods. a. UG 2: Apply critical thinking to argument and problem solving, b. UG 3: Develop Scientific Literacy, c. UG 4: Apply quantitative reasoning in appropriate contexts
- Ethical and Social Responsibility in a Diverse World:** The skills in this domain involve the development of ethically and socially responsible

behaviors for professional and personal settings in a landscape that involves increasing diversity. a. UG 9: Develop a worldview that acknowledges diversity and global independence

4. **Writing Competency:** Students should demonstrate competence in writing skills. a. UG 1: Act as effective communicators
5. **Professional Development:** Students should be able to express themselves effectively in written and oral communication. a. UG 5: Develop as a whole person, b. UG 7: Become civically engaged, c. UG 8: Act ethically

## What are your options?

**Pre-Physician Assistant SRU 3+2:** Earn a Master of Science degree in Physician Assistant Studies in five years rather than six. In the first three years, you complete your major courses and pre-requisites for the SRU PA program. At the end of your second year, you apply for admission into the SRU PA program. If accepted, your first year in the SRU PA program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Physician Assistant (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU PA program and apply to the SRU PA program in your senior year.

## Related Links

Psychology - Pre-Physician Assistant, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/psychology-pre-physician-assistant/>)

Psychology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/psychology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

- **Overall GPA:** 3.25 or higher
- **Major GPA** (only includes all major requirement courses): 3.00 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	44
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Writing Competency Requirements	
	Major Requirements	56-57
	Electives	20

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Physical &amp; Natural Sciences Inquiry</i>		
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>44</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		



CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 28 major credits must be taken at SRU or PASSHE
- 28 major credits must be at the 300 level or above

Code	Title	Hours
<b>Goal 1: Scientific Literacy &amp; Foundations</b> <sup>1</sup>		
Must earn a grade of 'C' or higher in PSYC 105, 231, 232.		
Must earn a grade of 'B' or higher in PSYC 311.		
PSYC 105	Introduction to Psychology	3
PSYC 231	Psychological Science I: Research Methods	3
PSYC 232	Psychological Science II: Statistical Applications	3
PSYC 311	Introduction to Behavioral Neuroscience	4
Subtotal		13
<b>Goal 2: Breadth of Knowledge &amp; Making Connections</b> <sup>1</sup>		
<i>Psychology Core Courses</i>		
PSYC 244	Developmental Psychology	3
PSYC 276	Introduction to Abnormal Psychology	3
<i>Neuroscience Content Courses (select two)</i>		6
PSYC 233	Sensation & Perception	
PSYC 303	Learning	
PSYC 321	Drugs and Behavior	
PSYC 334	Health Psychology	
PSYC 338	Cognitive Psychology	
<i>Interdisciplinary Core Courses</i>		
BIOL 250	Genetics with Lab	4
CHEM 201	Organic Chemistry I	3
Subtotal		19
<b>Goal 3: Depth of Knowledge, Technical Expertise &amp; Research</b> <sup>1</sup>		
<i>Neuroscience Content Courses (select three)</i>		9
PSYC 471	Psychopharmacology	
PSYC 473	Hormones and Behavior	
PSYC 476	Clinical Neuroscience	
PSYC 477	Developmental Neuroscience	
<i>Research Capstone</i>		
PSYC 451	Research Capstone Internship	6
PSYC 451	Research Capstone Internship	6
<i>Interdisciplinary Core Course</i>		
BIOL 210	Medical Microbiology with Lab	3
or BIOL 303	Behavioral Ecology/Lab	

Subtotal	24
<b>Total Hours</b>	<b>56</b>

<sup>1</sup> Courses count for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Writing Competency Requirements

Code	Title	Hours
Writing in Psychology #1		
Writing in Psychology #2		
Writing in Psychology #3		
Professional Competencies Paper		

## Additional Physician Assistant Prerequisite Courses

Code	Title	Hours
BIOL 209		4
BIOL 309		4
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
EXSC 250	Medical Terminology	3
or HCAM 250	Medical Terminology for Healthcare Administrators	
<b>Total Hours</b>		<b>15</b>

## Co-Curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International Study Programs
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership (Psi Chi, Psychology Club, Reflections Body Image Organization, Nu Rho Psi, Neuro Rocks)
5. Service-learning classes
6. Career education planning (Office of Career Education and Development)
7. Internships
8. Volunteering in local human services and mental health agencies
9. Job shadowing

## Physician Assistant Studies (Master of Science in Physician Assistant Studies)

### Prerequisite Admission Requirements

#### For Application Requirements

Please refer to Slippery Rock University's Physician Assistant Studies (Master of Science in Physician Assistant Studies) website for requirements: <http://www.sru.edu/pa> (<http://www.sru.edu/pa/>).

**Rock Studies 2**

Code	Title	Hours
<b>Prerequisite Courses - SRU Physician Assistant</b>		
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 209		4
BIOL 309		4
BIOL 250	Genetics with Lab	4
BIOL 210 or BIOL 330	Medical Microbiology with Lab Microbiology/Lab	3
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
CHEM 201	Organic Chemistry I	3
EXSC 250 or HCAM 250	Medical Terminology Medical Terminology for Healthcare Administrators	3
PSYC 105	Introduction to Psychology	3
Inferential Statistics Course <sup>1</sup>		3
<b>Total Hours</b>		<b>39</b>

<sup>1</sup> Any statistics course with inferential statistics embedded. See My Rock Audit for specific courses.

**Important Curriculum Guide Notes**

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

PSYCHOLOGY - BS (6170)

Pre-PA SRU 3+2 (6SPP)

This program is effective as of Summer 2022

Revised 02.23.2023

UCC 01.31.2023

**Recommended Four-Year Plan**

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
PSYC 105	Introduction to Psychology	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
LIBR 110	Introduction to Library & Information Resources	1
STAT 152	Elementary Statistics I	3
<b>Hours</b>		<b>15</b>

**Spring**

PSYC 231	Psychological Science I: Research Methods	3
Creative & Aesthetic Inquiry (p. 29)		3
ENGL 104	Critical Reading	3
Civil Discourse Requirement - select one		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>15</b>

**Second Year****Fall**

PSYC 232	Psychological Science II: Statistical Applications	3
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
PSYC 276	Introduction to Abnormal Psychology	3
Humanities Inquiry (p. 29)		3
Free Elective (Neuro Recommended)		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>16</b>

**Spring**

PSYC 311	Introduction to Behavioral Neuroscience	4
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
PSYC 244	Developmental Psychology	3
Free Elective (Neuro Recommended)		3
<b>Hours</b>		<b>14</b>

**Third Year****Fall**

Goal 2: Neuroscience Content Course #1		3
CHEM 201	Organic Chemistry I	3
BIOL 250	Genetics with Lab	4
Free Elective (Neuro Recommended)		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>16</b>

**Spring**

Goal 2: Neuroscience Content Course #2		3
Goal 3: Neuroscience Content Course #1		3
BIOL 210	Medical Microbiology with Lab	3
EXSC 250	Medical Terminology	3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>

**Fourth Year****Fall**

PSYC 451	Research Capstone Internship	6
Goal 3: Neuroscience Content Course #2		3
BIOL 216	Anatomy and Physiology I with Lab	3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>

**Spring**

PSYC 451	Research Capstone Internship	6
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Goal 3: Neuroscience Content Course #3	3
BIOL 217 Anatomy and Physiology II with Lab	3
Thematic Thread Requirement (p. 29)	3
<b>Hours</b>	<b>15</b>
<b>Total Hours**</b>	<b>121</b>

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.
- <sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.
- \* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6170/Traditional  
Revised 05.25.2022

## Psychology, Bachelor of Science (BS) / Counseling Psychology w/Chatham University (MSCP), Accelerated

The accelerated concentration within the Psychology BS will prepare students for the Master of Science in Counseling Psychology (MSCP) at Chatham University. The accelerated concentration is designed to give students an opportunity to enrich their undergraduate education with an intensive program in psychology and facilitate their entry into the M.S. Counseling Psychology at Chatham University. The course work is tailored to meet the needs of the student as both a Psychology major and in a career in counseling psychology.

The following are the Pre-Chatham MSCP accelerated concentration requirements. If any of the following criteria are not satisfied, the concentration designation will be removed from the student's record:

1. A minimum of a grade of C in each psychology course
2. A cumulative GPA of 3.5 or better on a 4.0 scale
3. All Psychology required courses taken through SRU, except Introduction to Psychology
4. Required Professional Competency must be taken at SRU
5. Psychology elective courses may be transferred
6. Recommended that the student meet with a faculty member from Chatham University (either in person, by phone or by email) during their sophomore or junior year

## Program Learning Outcomes

- **Theory and Content of Psychology:** Students should be familiar with the major theoretical approaches, findings, and historical trends in psychology.
- **Methodology:** Students should understand and be able to use major research methods in psychology, including design, data analysis, and interpretation.

- **Critical Thinking, Logic, and Problem-Solving:** Students should use and respect skeptical inquiry, critical thinking, and the scientific approach to understanding behavior.
- **Information Competence, Technology, and Computers:** Students should demonstrate information competence and the ability to use computers and other technology for multiple purposes.
- **Communication Skills:** Students should be able to express themselves effectively in written and oral communication.
- **Application of Psychology:** Students should have an understanding of applications of psychology to personal, social, and organizational issues.

## Related Links

Psychology - Pre-Counseling (MSCP) with Chatham, BS Program Page ([https://www.sru.edu/academics/majors-and-minors/psychology-pre-counseling-psychology-\(mscp\)-with-chatham-university/](https://www.sru.edu/academics/majors-and-minors/psychology-pre-counseling-psychology-(mscp)-with-chatham-university/))

Psychology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/psychology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 3.0 or higher  
Overall GPA: 3.5 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	49-50
	Electives	29

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		

Select 3 Credits (p. 29)	3
<i>Social Science Inquiry</i>	
Select 3 Credits (p. 29)	3
<i>Natural Sciences Inquiry</i>	
SCI 101 Science of Life	3
<i>Physical Science Inquiry</i>	
SCI 102 Understanding the Physical World	3
Subtotal	15
<b>Thematic Thread</b>	
Select 12 Credits (p. 29) <sup>2</sup>	12
<b>Total Hours</b>	<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 25 major credits must be taken at SRU or PASSHE
- 25 major credits must be taken at the 300 level or above
- Overall, 48 credit hours must be completed at the 300 or 400 level

- Students who do not meet minimum standards will be dismissed from the program. All dismissals are permanent.

Code	Title	Hours
<b>Required Courses (Grade of 'C' or higher required) <sup>1</sup></b>		
Required Courses may only be repeated once.		
PSYC 105	Introduction to Psychology	3
PSYC 231	Psychological Science I: Research Methods	3
PSYC 232	Psychological Science II: Statistical Applications	3
PSYC 244	Developmental Psychology	3
PSYC 276	Introduction to Abnormal Psychology	3
PSYC 311	Introduction to Behavioral Neuroscience	4
PSYC 375	Psychopathology of Adulthood	3
Subtotal		22
<b>Applied Psychology Electives <sup>1</sup></b>		
Select two of the following:		6
PSYC 208	Personality	
PSYC 304	Theories of Counseling	
PSYC 306	Introduction to Psychological Testing	
PSYC 318	Psychopathology of Childhood and Adolescence	
PSYC 320	Introduction to Clinical Psychology	
PSYC 475	Behavior Modification	
<b>Biobehavioral Elective <sup>1</sup></b>		
Select one of the following:		3-4
PSYC 233	Sensation & Perception	
PSYC 289	Positive Psychology	
PSYC 303	Learning	
PSYC 321	Drugs and Behavior	
PSYC 334	Health Psychology	
PSYC 338	Cognitive Psychology	
PSYC 471	Psychopharmacology	
PSYC 473	Hormones and Behavior	
PSYC 476	Clinical Neuroscience	
<b>Developmental Psychology Electives <sup>1</sup></b>		
Select two of the following:		6
PSYC 364	Child and Adolescent Development	
PSYC 365	Psychology of Aging	
PSYC 415	Multicultural Identity Development	
PSYC 477	Developmental Neuroscience	
<b>Diversity Elective <sup>1</sup></b>		
Select one of the following:		3
PSYC 240	Human Sexual Behavior	
PSYC 300	Psychology of Women, Gender and Culture	
PSYC 315	Psychology of Sexual and Gender Diversity	
PSYC 392	Cross Cultural Psychology	
<b>Required Professional Competency <sup>1</sup></b>		
PSYC 450 & PSYC 485	Field Placement Internship in Psychology and Senior Integration Seminar	9
<b>Total Hours</b>		<b>49-50</b>

<sup>1</sup> Courses count for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Electives

Code	Title	Hours
PSYC 350	Contemporary Topics in Psychological Science (Course may be repeated for a total of 2 credits)	1

## Writing Competency Requirements

Code	Title	Hours
Writing in Psychology #1		
Writing in Psychology #2		
Writing in Psychology #3		
Professional Competencies Paper		

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International Study Programs
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership (Psi Chi, Psychology Club, Reflections Body Image Organization, Nu Rho Psi, Neuro Rocks)
5. Service-learning classes
6. Career education planning (Office of Career Education and Development)
7. Internships
8. Volunteering in local human services and mental health agencies
9. Job shadowing

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

PSYCHOLOGY - BS (6170)

Counseling PSYC with Chatham University (MSCP) (617A)

This program is effective as of Summer 2022

Revised 04.21.2022

UCC 02.15.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
PSYC 105	Introduction to Psychology	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
STAT 152	Elementary Statistics I	3
LIBR 110	Introduction to Library & Information Resources	1
Creative and Aesthetic Inquiry Course		3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
PSYC 231	Psychological Science I: Research Methods	3
ENGL 104	Critical Reading	3
PSYC 276	Introduction to Abnormal Psychology	3
Humanities Inquiry Course		3
SCI 101	Science of Life	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
PSYC 232	Psychological Science II: Statistical Applications	3
PSYC 244	Developmental Psychology	3
PSYC Elective #1		3
SCI 102	Understanding the Physical World	3
Civil Discourse Requirement - select one		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
PSYC Elective #2		3
PSYC Elective #3		3
PSYC Elective #4		3
Thematic Thread Requirement		3
Thematic Thread Requirement		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
PSYC 311	Introduction to Behavioral Neuroscience	4
PSYC Elective #5		3
PSYC Elective #6		3
Thematic Thread Requirement		3
Thematic Thread Requirement		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
PSYC 450	Field Placement Internship in Psychology	6
PSYC 485	Senior Integration Seminar	3
PSYC 375	Psychopathology of Adulthood	3



Free Elective	3
<b>Hours</b>	<b>15</b>
<b>Total Hours**</b>	<b>93</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

Major Code: 6170

Concentration Code: MSCP (617A)

Revised: 09.21.20

## Psychology, Bachelor of Science (BS) / Pre-Counseling (SRU) (3+3)

The Psychology program offers a Pre-Counseling 3+3 option for students interested in a career in Mental Health Counseling. Undergraduate students work with their academic adviser to complete courses needed to fulfill the requirements for both a Bachelor of Science degree and the entrance requirements for either of two Master of Arts programs: Clinical Mental Health Counseling or Student Affairs in Higher Education with College Counseling. Graduate study in both of these programs prepares students for licensure as a Professional Counselor. The Psychology program prepares students for graduate study by providing a strong basis in the biopsychosocial processes of human functioning. The first year of the Master of Arts program meets the requirements for the fourth year of the Bachelor of Science degree.

### Psychology (BS) - 3+3 Pre-Counseling

3+3 Pre-Counseling program requirements:

- Students are required to maintain minimum Overall and Psychology GPAs of 3.0 in order to retain the major in Psychology. Students are required to earn a grade of C or higher in Introduction to Psychology (PSYC 105) in order to take all other Psychology courses. Students are required to earn a grade of C or higher in Psychological Science I: Research Methods (PSYC 231) and Psychological Science II: Statistical Applications (PSYC 232) in order to progress in the program. Each course can only be repeated once.

### Program Learning Outcomes

- Theory and Content of Psychology:** Students should be familiar with the major theoretical approaches, findings, and historical trends in psychology.
- Methodology:** Students should understand and be able to use major research methods in psychology, including design, data analysis, and interpretation.
- Critical Thinking, Logic, and Problem-Solving:** Students should use and respect skeptical inquiry, critical thinking, and the scientific approach to understanding behavior.

- Information Competence, Technology, and Computers:** Students should demonstrate information competence and the ability to use computers and other technology for multiple purposes.
- Communication Skills:** Students should be able to express themselves effectively in written and oral communication.
- Application of Psychology:** Students should have an understanding of applications of psychology to personal, social, and organizational issues.

## Related Links

Psychology - Pre-Counseling, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/psychology-pre-counseling-33/>)

Psychology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/psychology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 3.0 or higher

Overall GPA: 3.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	42-44
	Electives	36

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the 1<sup>st</sup> year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3

<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above
- Overall, 48 credit hours must be completed at the 300 or 400 level

- Students who do not meet minimum standards will be dismissed from the program. All dismissals are permanent.

Code	Title	Hours
<b>Required Courses (Grade of 'C' or higher required) <sup>1</sup></b>		
Required Courses may only be repeated once.		
PSYC 105	Introduction to Psychology	3
PSYC 231	Psychological Science I: Research Methods	3
PSYC 232	Psychological Science II: Statistical Applications	3
PSYC 244	Developmental Psychology	3
PSYC 276	Introduction to Abnormal Psychology <sup>2</sup>	3
PSYC 375	Psychopathology of Adulthood	3
Subtotal		18
<b>Applied Psychology Electives <sup>1</sup></b>		
Select two of the following:		6
PSYC 208	Personality	
PSYC 304	Theories of Counseling	
PSYC 306	Introduction to Psychological Testing	
PSYC 318	Psychopathology of Childhood and Adolescence	
PSYC 320	Introduction to Clinical Psychology	
PSYC 475	Behavior Modification	
Subtotal		6
<b>Biobehavioral Elective <sup>1</sup></b>		
Select two of the following:		6-8
PSYC 233	Sensation & Perception	
PSYC 289	Positive Psychology	
PSYC 303	Learning	
PSYC 311	Introduction to Behavioral Neuroscience	
PSYC 321	Drugs and Behavior	
PSYC 334	Health Psychology	
PSYC 338	Cognitive Psychology	
PSYC 471	Psychopharmacology	
PSYC 473	Hormones and Behavior	
PSYC 476	Clinical Neuroscience	
Subtotal		6-8
<b>Developmental Psychology Electives <sup>1</sup></b>		
Select two of the following:		6
PSYC 364	Child and Adolescent Development	
PSYC 365	Psychology of Aging	
PSYC 415	Multicultural Identity Development	
PSYC 428	Social and Emotional Development Across the Lifespan	
PSYC 445	Infant and Child Cognition	
PSYC 477	Developmental Neuroscience	
Subtotal		6
<b>Diversity Elective <sup>1</sup></b>		
Select one of the following:		3
PSYC 240	Human Sexual Behavior	
PSYC 300	Psychology of Women, Gender and Culture	
PSYC 315	Psychology of Sexual and Gender Diversity	
PSYC 392	Cross Cultural Psychology	

Subtotal		3
<b>Required Professional Competency</b>		<b>1</b>
PSYC 420	Community Service Practicum in Psychology	3
or PSYC 430	Research Practicum in Psychology	

**Total Hours** **43-45**

- <sup>1</sup> Courses count for 50% of Major requirements and Major GPA
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Electives

Code	Title	Hours
PSYC 350	Contemporary Topics in Psychological Science (Course may be repeated for a total of 2 credits)	1

## Writing Competency Requirements

Code	Title	Hours
Writing in Psychology #1		
Writing in Psychology #2		
Writing in Psychology #3		

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International Study Programs
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership (Psi Chi, Psychology Club, Reflections Body Image Organization, Nu Rho Psi, Neuro Rocks)
5. Service-learning classes
6. Career education planning (Office of Career Education and Development)
7. Internships
8. Volunteering in local human services and mental health agencies
9. Job shadowing Volunteering

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

PSYCHOLOGY - BS (6170)  
Pre-Counseling 3+3 (617C)  
This program is effective as of Fall 2019.

Revised 09.15.20  
UCC 02.18.20

## Recommended Three-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
PSYC 105	Introduction to Psychology	3
ENGL 102	Critical Writing	3
STAT 152	Elementary Statistics I	3
Creative and Aesthetic Inquiry Course		3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
LIBR 110	Introduction to Library & Information Resources	1
ESAP 101	FYRST Seminar *	1
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
PSYC 231	Psychological Science I: Research Methods	3
PSYC 276	Introduction to Abnormal Psychology	3
ENGL 104	Critical Reading	3
SCI 101	Science of Life	3
Humanities Inquiry Course		3
Free Elective		3
<b>Hours</b>		<b>18</b>
<b>Second Year</b>		
<b>Fall</b>		
PSYC 232	Psychological Science II: Statistical Applications	3
PSYC 244	Developmental Psychology	3
PSYC Elective #1		3
Civil Discourse Requirement - select one		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
SCI 102	Understanding the Physical World	3
Thematic Thread Requirement		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>18</b>
<b>Spring</b>		
PSYC Elective #2		3-4
PSYC Elective #3		3-4
PSYC Elective #4		3
Thematic Thread Requirement		3
Thematic Thread Requirement		3
Social Science Inquiry or Free Elective (if all other courses are 3 credits)		3
<b>Hours</b>		<b>18-20</b>
<b>Third Year</b>		
<b>Fall</b>		
PSYC 375	Psychopathology of Adulthood	3
PSYC Elective #5		3
PSYC Elective #6		3
PSYC Elective #7		3

Thematic Thread Requirement		3
Free Elective (if needed)		3
Hours		18
Spring		
PSYC 420 or PSYC 430	Community Service Practicum in Psychology or Research Practicum in Psychology	3
Free Elective		3
Free Elective		3
Free Elective		3
Hours		12
Total Hours**		101-103

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.
- <sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.
- \* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6170

Concentration Code: 617C

Revised: 09.21.20

## Psychology, Bachelor of Science (BS) / Pre-Occupational Therapy (SRU) (3+3)

### Psychology Program Learning Outcomes

- Knowledge Base in Psychology:** Students should demonstrate fundamental knowledge and comprehension in the major concepts, theoretical perspectives, historical trends, and empirical findings to discuss how psychological principles are applied. a. UG 2: Apply critical thinking to argument and problem solving, b. UG 3: Develop Scientific Literacy
- Scientific Inquiry and Critical Thinking:** The skills in this domain involve the development of scientific reasoning and problem-solving, including effective research methods. a. UG 2: Apply critical thinking to argument and problem solving, b. UG 3: Develop Scientific Literacy, c. UG 4: Apply quantitative reasoning in appropriate contexts
- Ethical and Social Responsibility in a Diverse World:** The skills in this domain involve the development of ethically and socially responsible behaviors for professional and personal settings in a landscape that involves increasing diversity. a. UG 9: Develop a worldview that acknowledges diversity and global independence
- Writing Competency:** Students should demonstrate competence in writing skills. a. UG 1: Act as effective communicators
- Professional Development:** Students should be able to express themselves effectively in written and oral communication. a. UG 5:

Develop as a whole person, b. UG 7: Become civically engaged, c. UG 8: Act ethically

## What are your options?

**Pre-Occupational Therapy SRU 3+3:** Earn a Doctor of Occupational Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU OTD program. At the end of your second year, you apply for admission into the SRU OTD program. If accepted, your first year in the SRU OTD program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Occupational Therapy (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU OTD program and apply to the SRU OTD program in your senior year.

## Related Links

Psychology - Pre-Occupational Therapy, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/psychology-pre-occupational-therapy/>)

Psychology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/psychology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

#### 1<sup>st</sup> Major: Psychology

- Overall GPA: 2.00 or higher
- Major GPA (only includes Psychology courses): 2.50 or higher

#### 2<sup>nd</sup> Major: Pre-OT SRU 3+3 Psychology

- Overall GPA: 3.00 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	44
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Writing Competency Requirements	
	Major Requirements	34-35
	Electives	41-42

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the 1<sup>st</sup> year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3

ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
BIOL 209		4
<i>Physical Science Inquiry</i>		
PHYS 201	Elements of Physics I with Lab	4
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>44</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	

PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- All Psychology Required courses, except PSYC 105, and Professional Competency must be taken at SRU.
- If Psychology Electives are transferred in, only grades of A and B will transfer
- If you choose to pursue Pre-Occupational Therapy SRU 3+3 Psychology and are not accepted into the OTD program, then additional coursework is required to complete a first major of Psychology. Please refer to the Psychology BS Curriculum Guide.

Code	Title	Hours
<b>Psychology Required Courses (Grade of A or B required) <sup>1</sup></b>		
PSYC 105	Introduction to Psychology	3
PSYC 231	Psychological Science I: Research Methods	3
PSYC 232	Psychological Science II: Statistical Applications	3
PSYC 244	Developmental Psychology	3
PSYC 276	Introduction to Abnormal Psychology	3
PSYC 311	Introduction to Behavioral Neuroscience	4
Subtotal		19
<b>Psychology Elective Diversity <sup>1</sup></b>		
Select one of the following:		3
PSYC 300	Psychology of Women, Gender and Culture	
PSYC 315	Psychology of Sexual and Gender Diversity	
PSYC 392	Cross Cultural Psychology	
<b>Psychology Elective Applied <sup>1</sup></b>		
Select one of the following:		3
PSYC 304	Theories of Counseling	
PSYC 306	Introduction to Psychological Testing	
PSYC 318	Psychopathology of Childhood and Adolescence	
PSYC 320	Introduction to Clinical Psychology	
PSYC 375	Psychopathology of Adulthood	
PSYC 475	Behavior Modification	
<b>Psychology Elective Biobehavioral <sup>1</sup></b>		
Select one of the following:		3-4
PSYC 233	Sensation & Perception	
PSYC 289	Positive Psychology	
PSYC 303	Learning	
PSYC 321	Drugs and Behavior	
PSYC 334	Health Psychology	
PSYC 338	Cognitive Psychology	
PSYC 471	Psychopharmacology	
PSYC 473	Hormones and Behavior	
PSYC 476	Clinical Neuroscience	
<b>Psychology Elective Development <sup>1</sup></b>		



Select one of the following:	3
PSYC 364	Child and Adolescent Development
PSYC 365	Psychology of Aging
PSYC 415	Multicultural Identity Development
PSYC 428	Social and Emotional Development Across the Lifespan
PSYC 445	Infant and Child Cognition
PSYC 477	Developmental Neuroscience
<b>Required Professional Competency<sup>1</sup></b>	
PSYC 420	Community Service Practicum in Psychology
<b>Total Hours</b>	<b>34-35</b>

<sup>1</sup> Courses count for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Writing Competency Requirements

Code	Title	Hours
Writing in Psychology #1		
Writing in Psychology #2		
Writing in Psychology #3		
Writing in Psychology #4		

## Additional Occupational Therapy Prerequisite Courses

Code	Title	Hours
BIOL 309		4
Select one of the following:		3
INDP 106	Race and Ethnic Diversity in the USA	
INDP 202	Introduction to Anthropology	
INDP 310	Cultural Area Studies	
INDP 321	Minority Groups	
SOWK 105	Human Diversity	
EXSC 250 or HCAM 250	Medical Terminology Medical Terminology for Healthcare Administrators	3
<b>Total Hours</b>		<b>10</b>

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International Study Programs
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership (Psi Chi, Psychology Club, Reflections Body Image Organization, Nu Rho Psi, Neuro Rocks)
5. Service-learning classes
6. Career education planning (Office of Career Education and Development)
7. Internships

8. Volunteering in local human services and mental health agencies
9. Job shadowing Volunteering

## Doctor of Occupational Therapy (OTD) Prerequisite Admission Requirements

### For Application Requirements

Please refer to Slippery Rock University's Occupational Therapy Studies (Master of Science in Occupational Therapy Studies) website for requirements: <http://www.sru.edu/OT> (<http://www.sru.edu/OT/>)

### Rock Studies 2

Code	Title	Hours
<b>Prerequisite Courses - SRU Occupational Therapy</b>		
BIOL 209		4
BIOL 309		4
EXSC 250 or HCAM 250	Medical Terminology Medical Terminology for Healthcare Administrators	3
PHYS 201 or PE 364	Elements of Physics I with Lab Biomechanics of Individuals with Disabilities	4
STAT 152	Elementary Statistics I	3
PSYC 105	Introduction to Psychology	3
PSYC 244	Developmental Psychology	3
PSYC 276	Introduction to Abnormal Psychology	3
Research Methods - Select One: <sup>1</sup>		3
EXSC 300	Research Methods in Exercise Science	
HCAM 499	Health Care Theory and Research Capstone Seminar	
INDP 318	Research Methods in Interdisciplinary Studies	
PSYC 231 & PSYC 232	Psychological Science I: Research Methods and Psychological Science II: Statistical Applications	
SOWK 318	Research Methods	
Anthropology or Sociology - Select One: <sup>1</sup>		3
INDP 106	Race and Ethnic Diversity in the USA	
INDP 202	Introduction to Anthropology	
INDP 211	Biological Anthropology	
INDP 309	Health and Society	
INDP 310	Cultural Area Studies	
INDP 321	Minority Groups	
INDP 324	The Family	
INDP 326	Society, Culture and Self	
INDP 339	Gender Roles and Society	
INDP 342	Sociology of Aging	
RCTH 120	Disability, Community Inclusion, and Diversity	
SOWK 105	Human Diversity	
<b>Total Hours</b>		<b>33</b>

<sup>1</sup> Select one course. See *My Rock Audit* for specific courses.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-

earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

PSYCHOLOGY - BS (6170)

Pre-OT SRU 3+3 (6PS0)

This program is effective as of Summer 2022

Revised 02.23.23

UCC 02.14.23

## Recommended Three-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
PSYC 105	Introduction to Psychology	3
ENGL 102	Critical Writing	3
STAT 152	Elementary Statistics I	3
Creative & Aesthetic Inquiry (p. 29)		3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
LIBR 110	Introduction to Library & Information Resources	1
ESAP 101	FYRST Seminar *	1
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
Humanities Inquiry (p. 29)		3
Civil Discourse Requirement - select one		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
ENGL 104	Critical Reading	3
PSYC 231	Psychological Science I: Research Methods	3
PSYC 244	Developmental Psychology	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
BIOL 216	Anatomy and Physiology I with Lab	3
PSYC 232	Psychological Science II: Statistical Applications	3
PSYC 276	Introduction to Abnormal Psychology	3
Select one of the following:		3
INDP 202	Introduction to Anthropology	
SOWK 105	Human Diversity	
INDP 106	Race and Ethnic Diversity in the USA	
INDP 310	Cultural Area Studies	
INDP 321	Minority Groups	
Thematic Thread Requirement (p. 29)		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>

### Spring

PSYC 420	Community Service Practicum in Psychology	3
PSYC Elective #1		3
BIOL 217	Anatomy and Physiology II with Lab	3
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>

### Third Year

#### Fall

PSYC Elective #2		3
PSYC Elective #3		3
PHYS 201	Elements of Physics I with Lab	4
Thematic Thread Requirement (p. 29)		3
Upper-Division Elective		3
<b>Hours</b>		<b>16</b>

#### Spring

PSYC 311	Introduction to Behavioral Neuroscience	4
PSYC Elective #4 (Developmental)		3
EXSC 250	Medical Terminology	3
Upper-Division Elective		3
Upper-Division Elective		3
<b>Hours</b>		<b>16</b>
<b>Total Hours**</b>		<b>94</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6170

Concentration Code: 6PS0

Revised 05.25.22

## Psychology, Bachelor of Science (BS) / Pre-Occupational Therapy (SRU) (Traditional)

### Psychology Program Learning Outcomes

- Knowledge Base in Psychology:** Students should demonstrate fundamental knowledge and comprehension in the major concepts, theoretical perspectives, historical trends, and empirical findings to discuss how psychological principles are applied. a. UG 2: Apply critical thinking to argument and problem solving, b. UG 3: Develop Scientific Literacy
- Scientific Inquiry and Critical Thinking:** The skills in this domain involve the development of scientific reasoning and problem-solving,

including effective research methods. a. UG 2: Apply critical thinking to argument and problem solving, b. UG 3: Develop Scientific Literacy, c. UG 4: Apply quantitative reasoning in appropriate contexts

3. **Ethical and Social Responsibility in a Diverse World:** The skills in this domain involve the development of ethically and socially responsible behaviors for professional and personal settings in a landscape that involves increasing diversity. a. UG 9: Develop a worldview that acknowledges diversity and global independence
4. **Writing Competency:** Students should demonstrate competence in writing skills. a. UG 1: Act as effective communicators
5. **Professional Development:** Students should be able to express themselves effectively in written and oral communication. a. UG 5: Develop as a whole person, b. UG 7: Become civically engaged, c. UG 8: Act ethically

## What are your options?

**Pre-Occupational Therapy SRU 3+3:** Earn a Doctor of Occupational Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU OTD program. At the end of your second year, you apply for admission into the SRU OTD program. If accepted, your first year in the SRU OTD program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Occupational Therapy (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU OTD program and apply to the SRU OTD program in your senior year.

## Related Links

Psychology - Pre-Occupational Therapy, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/psychology-pre-occupational-therapy/>)

Psychology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/psychology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

- Overall GPA: 2.00 or higher
- Major GPA (only includes Psychology courses): 2.50 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	44
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Writing Competency Requirements	
	Major Requirements	49-50
	Electives	26-27

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
BIOL 209		4
<i>Physical Science Inquiry</i>		
PHYS 201	Elements of Physics I with Lab	4
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>44</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	

CPSC 110	Computer Concepts
CPSC 130	Introduction to Computing and Programming
PE 202	Technology for Wellness
<b>Total Hours</b>	<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- All Psychology Required courses, except PSYC 105, and Professional Competency must be taken at SRU.
- If Psychology Electives are transferred in, only grades of A and B will transfer

Code	Title	Hours
<b>Psychology Required Courses (Grade of A or B required) <sup>1</sup></b>		
PSYC 105	Introduction to Psychology	3
PSYC 231	Psychological Science I: Research Methods	3
PSYC 232	Psychological Science II: Statistical Applications	3
PSYC 244	Developmental Psychology	3
PSYC 276	Introduction to Abnormal Psychology	3
PSYC 311	Introduction to Behavioral Neuroscience	4
Subtotal		19
Subtotal		0
<b>Psychology Elective Diversity <sup>1</sup></b>		
Select one from the following:		3
PSYC 300	Psychology of Women, Gender and Culture	
PSYC 315	Psychology of Sexual and Gender Diversity	
PSYC 392	Cross Cultural Psychology	
<b>Psychology Elective Applied <sup>1</sup></b>		
Select two from the following:		6
PSYC 304	Theories of Counseling	
PSYC 306	Introduction to Psychological Testing	
PSYC 318	Psychopathology of Childhood and Adolescence	
PSYC 320	Introduction to Clinical Psychology	
PSYC 375	Psychopathology of Adulthood	
PSYC 475	Behavior Modification	
<b>Psychology Elective Biobehavioral <sup>1</sup></b>		
Select two from the following:		6-7
PSYC 233	Sensation & Perception	
PSYC 289	Positive Psychology	
PSYC 303	Learning	
PSYC 321	Drugs and Behavior	
PSYC 334	Health Psychology	
PSYC 338	Cognitive Psychology	
PSYC 471	Psychopharmacology	
PSYC 473	Hormones and Behavior	
PSYC 476	Clinical Neuroscience	

<b>Psychology Elective Development <sup>1</sup></b>		
Select two from the following:		6
PSYC 364	Child and Adolescent Development	
PSYC 365	Psychology of Aging	
PSYC 415	Multicultural Identity Development	
PSYC 428	Social and Emotional Development Across the Lifespan	
PSYC 445	Infant and Child Cognition	
PSYC 477	Developmental Neuroscience	
<b>Required Professional Competency <sup>1</sup></b>		
PSYC 450	Field Placement Internship in Psychology	6
PSYC 485	Senior Integration Seminar	3
<b>Total Hours</b>		<b>49-50</b>

<sup>1</sup> Courses count for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Writing Competency Requirements

Code	Title	Hours
Writing in Psychology #1		
Writing in Psychology #2		
Writing in Psychology #3		
Professional Competencies Paper		

## Additional Occupational Therapy Prerequisite Courses

Code	Title	Hours
BIOL 309		4
Select one of the following:		3
INDP 106	Race and Ethnic Diversity in the USA	
INDP 202	Introduction to Anthropology	
INDP 310	Cultural Area Studies	
INDP 321	Minority Groups	
SOWK 105	Human Diversity	
EXSC 250	Medical Terminology	3
or HCAM 250	Medical Terminology for Healthcare Administrators	
<b>Total Hours</b>		<b>10</b>

## Doctor of Occupational Therapy (OTD) Prerequisite Admission Requirements

### For Application Requirements

Please refer to Slippery Rock University's Occupational Therapy Studies (Master of Science in Occupational Therapy Studies) website for requirements: <http://www.sru.edu/OT> (<http://www.sru.edu/OT/>)

### Rock Studies 2

Code	Title	Hours
<b>Prerequisite Courses - SRU Occupational Therapy</b>		
BIOL 209		4
BIOL 309		4
EXSC 250	Medical Terminology	3
or HCAM 250	Medical Terminology for Healthcare Administrators	

PHYS 201 or PE 364	Elements of Physics I with Lab Biomechanics of Individuals with Disabilities	4
STAT 152	Elementary Statistics I	3
PSYC 105	Introduction to Psychology	3
PSYC 244	Developmental Psychology	3
PSYC 276	Introduction to Abnormal Psychology	3
Research Methods - Select One: <sup>1</sup>		3
EXSC 300	Research Methods in Exercise Science	
HCAM 499	Health Care Theory and Research Capstone Seminar	
INDP 318	Research Methods in Interdisciplinary Studies	
PSYC 231 & PSYC 232	Psychological Science I: Research Methods and Psychological Science II: Statistical Applications	
SOWK 318	Research Methods	
Anthropology or Sociology - Select One: <sup>1</sup>		3
INDP 106	Race and Ethnic Diversity in the USA	
INDP 202	Introduction to Anthropology	
INDP 211	Biological Anthropology	
INDP 309	Health and Society	
INDP 310	Cultural Area Studies	
INDP 321	Minority Groups	
INDP 324	The Family	
INDP 326	Society, Culture and Self	
INDP 339	Gender Roles and Society	
INDP 342	Sociology of Aging	
RCTH 120	Disability, Community Inclusion, and Diversity	
SOWK 105	Human Diversity	
<b>Total Hours</b>		<b>33</b>

<sup>1</sup> Select one course. See *My Rock Audit* for specific courses.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

PSYCHOLOGY - BS (6170)

Pre-OT 4+3 (PX)

This program is effective as of Summer 2022

Revised 02.23.23

UCC 02.14.23

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
PSYC 105	Introduction to Psychology	3
ENGL 102	Critical Writing	3
STAT 152	Elementary Statistics I	3
	Creative & Aesthetic Inquiry (p. 29)	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
LIBR 110	Introduction to Library & Information Resources	1
ESAP 101	FYRST Seminar *	1
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
PSYC 231	Psychological Science I: Research Methods	3
PSYC 244	Developmental Psychology	3
ENGL 104	Critical Reading	3
	Civil Discourse Requirement - select one	3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
	Humanities Inquiry (p. 29)	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
BIOL 216	Anatomy and Physiology I with Lab	3
PSYC 232	Psychological Science II: Statistical Applications	3
PSYC 276	Introduction to Abnormal Psychology	3
	Select one of the following:	3
INDP 202	Introduction to Anthropology	
SOWK 105	Human Diversity	
INDP 106	Race and Ethnic Diversity in the USA	
INDP 310	Cultural Area Studies	
INDP 321	Minority Groups	
	PSYC Elective #1	3
	Declare a Thematic Thread <sup>2</sup>	
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
PSYC 311	Introduction to Behavioral Neuroscience	4
	PSYC Elective #2	3
	PSYC Elective #3	3
	Thematic Thread Requirement (p. 29)	3
BIOL 217	Anatomy and Physiology II with Lab	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
	PSYC Elective #4	3
	PSYC Elective #5	3
	Thematic Thread Requirement (p. 29)	3
	Thematic Thread Requirement (p. 29)	3



Free Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
PSYC 450	Field Placement Internship in Psychology	1-6
PSYC 485	Senior Integration Seminar	3
EXSC 250	Medical Terminology	3
<b>Hours</b>		<b>7-12</b>
<b>Fourth Year</b>		
<b>Fall</b>		
PSYC Elective #6		3
PHYS 201	Elements of Physics I with Lab	4
Thematic Thread Requirement (p. 29)		3
Free Elective		3
Free Elective		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
PSYC Elective #7		3
Free Elective		3
Free Elective		3
Free Elective		3
Upper Division Free Elective		3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>116-121</b>

1 Course offered in multiple subjects; cannot take course in first major subject.

2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6170  
Revised 05.25.2022

## Psychology, Bachelor of Science (BS) / Pre-Physician Assistant (SRU) (3+2)

### Psychology Program Learning Outcomes

- Knowledge Base in Psychology:** Students should demonstrate fundamental knowledge and comprehension in the major concepts, theoretical perspectives, historical trends, and empirical findings to discuss how psychological principles are applied. a. UG 2: Apply critical thinking to argument and problem solving, b. UG 3: Develop Scientific Literacy
- Scientific Inquiry and Critical Thinking:** The skills in this domain involve the development of scientific reasoning and problem-solving, including effective research methods. a. UG 2: Apply critical thinking

to argument and problem solving, b. UG 3: Develop Scientific Literacy, c. UG 4: Apply quantitative reasoning in appropriate contexts

- Ethical and Social Responsibility in a Diverse World:** The skills in this domain involve the development of ethically and socially responsible behaviors for professional and personal settings in a landscape that involves increasing diversity. a. UG 9: Develop a worldview that acknowledges diversity and global independence
- Writing Competency:** Students should demonstrate competence in writing skills. a. UG 1: Act as effective communicators
- Professional Development:** Students should be able to express themselves effectively in written and oral communication. a. UG 5: Develop as a whole person, b. UG 7: Become civically engaged, c. UG 8: Act ethically

### What are your options?

**Pre-Physician Assistant SRU 3+2:** Earn a Master of Science degree in Physician Assistant Studies in five years rather than six. In the first three years, you complete your major courses and pre-requisites for the SRU PA program. At the end of your second year, you apply for admission into the SRU PA program. If accepted, your first year in the SRU PA program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Physician Assistant (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU PA program and apply to the SRU PA program in your senior year.

### Related Links

Psychology - Pre-Physician Assistant, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/psychology-pre-physician-assistant/>)

Psychology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/psychology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

### Curriculum Guide

#### GPA Requirement

##### 1<sup>st</sup> Major: Psychology

- Overall GPA: 2.00 or higher
- Major GPA (only includes Psychology courses): 2.50 or higher

##### 2<sup>nd</sup> Major: Pre-PA SRU 3+2 Psychology

- Overall GPA: 3.00 or higher (before Fall 2018)
- Overall GPA: 3.25 or higher (Fall 2018 and after)

#### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	44
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Writing Competency Requirements	

Major Requirements	34-35
Electives	41

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the 1<sup>st</sup> year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.

Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Physical &amp; Natural Sciences Inquiry</i>		
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
Subtotal		17
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>44</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		

ESAP 110	Beginning Algebra
<b>Total Hours</b>	<b>0-3</b>

Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

Major Requirements

- All Psychology Required courses, except PSYC 105, and Professional Competency must be taken at SRU.
- If Psychology Electives are transferred in, only grades of A and B will transfer
- If you choose to pursue Pre-Physician Assistant SRU 3+2 Psychology and are not accepted into the PA program, then additional coursework is required to complete a first major of Psychology. Please refer to the Psychology BS Curriculum Guide

Code	Title	Hours
<b>Psychology Required Courses (Grade of A or B required) <sup>1</sup></b>		
PSYC 105	Introduction to Psychology	3
PSYC 231	Psychological Science I: Research Methods	3
PSYC 232	Psychological Science II: Statistical Applications	3
PSYC 244	Developmental Psychology	3
PSYC 276	Introduction to Abnormal Psychology	3
PSYC 311	Introduction to Behavioral Neuroscience	4
Subtotal		19
<b>Psychology Elective Diversity <sup>1</sup></b>		
Select one of the following:		3
PSYC 300	Psychology of Women, Gender and Culture	
PSYC 315	Psychology of Sexual and Gender Diversity	
PSYC 392	Cross Cultural Psychology	
<b>Psychology Elective Applied <sup>1</sup></b>		
Select one of the following:		3
PSYC 304	Theories of Counseling	
PSYC 306	Introduction to Psychological Testing	
PSYC 318	Psychopathology of Childhood and Adolescence	
PSYC 320	Introduction to Clinical Psychology	
PSYC 375	Psychopathology of Adulthood	

PSYC 475	Behavior Modification	
<b>Psychology Elective Biobehavioral <sup>1</sup></b>		
Select one of the following:		3-4
PSYC 233	Sensation & Perception	
PSYC 289	Positive Psychology	
PSYC 303	Learning	
PSYC 321	Drugs and Behavior	
PSYC 334	Health Psychology	
PSYC 338	Cognitive Psychology	
PSYC 471	Psychopharmacology	
PSYC 473	Hormones and Behavior	
PSYC 476	Clinical Neuroscience	
<b>Psychology Elective Development <sup>1</sup></b>		
Select one of the following:		3
PSYC 364	Child and Adolescent Development	
PSYC 365	Psychology of Aging	
PSYC 415	Multicultural Identity Development	
PSYC 428	Social and Emotional Development Across the Lifespan	
PSYC 445	Infant and Child Cognition	
PSYC 477	Developmental Neuroscience	
<b>Required Professional Competency <sup>1</sup></b>		
PSYC 420	Community Service Practicum in Psychology	3
<b>Total Hours</b>		<b>34-35</b>

- <sup>1</sup> Courses count for 50% of Major requirements and Major GPA
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Writing Competency Requirements

Code	Title	Hours
Writing in Psychology #1		
Writing in Psychology #2		
Writing in Psychology #3		
Writing in Psychology #4		

## Additional Physician Assistant Prerequisite Courses

Code	Title	Hours
BIOL 209		4
BIOL 309		4
BIOL 250	Genetics with Lab	4
BIOL 210 or BIOL 330	Medical Microbiology with Lab Microbiology/Lab	3
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
CHEM 201	Organic Chemistry I	3
EXSC 250 or HCAM 250	Medical Terminology Medical Terminology for Healthcare Administrators	3
<b>Total Hours</b>		<b>25</b>

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International Study Programs
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership (Psi Chi, Psychology Club, Reflections Body Image Organization, Nu Rho Psi, Neuro Rocks)
5. Service-learning classes
6. Career education planning (Office of Career Education and Development)
7. Internships
8. Volunteering in local human services and mental health agencies
9. Job shadowing

## Physician Assistant Studies (Master of Science in Physician Assistant Studies)

### Prerequisite Admission Requirements – Pre- Physician Assistant 3+2

#### For Application Requirements

Please refer to Slippery Rock University's Physician Assistant Studies (Master of Science in Physician Assistant Studies) website for requirements: <http://www.sru.edu/pa> (<http://www.sru.edu/pa/>)

## Rock Studies 2

Code	Title	Hours
<b>Prerequisite Courses - SRU Physician Assistant</b>		
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 210 or BIOL 330	Medical Microbiology with Lab Microbiology/Lab	3
BIOL 209		4
BIOL 309		4
BIOL 250	Genetics with Lab	4
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
CHEM 201	Organic Chemistry I	3
EXSC 250 or HCAM 250	Medical Terminology Medical Terminology for Healthcare Administrators	3
PSYC 105	Introduction to Psychology	3
Inferential Statistics Course <sup>1</sup>		3
<b>Total Hours</b>		<b>39</b>

- <sup>1</sup> Any statistics course with inferential statistics embedded. See My Rock Audit for specific courses.

## Pre-Physician Assistant SRU 3+2 Requirements

If any of these requirements are not met, the 3+2 designation will be removed from the student's record:

1. A 3.25 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Physician Assistant SRU 3+2 program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

### Provision

Should a Pre-Physician Assistant SRU 3+2 student be unsuccessful in completing the 1<sup>st</sup> two semesters (summer or fall) of the Physician Assistant Program and wants to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, Physician Assistant courses will count toward the completion of his/her undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the Physician Assistant Studies Program with an earned Bachelor's degree.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

PSYCHOLOGY - BS (6170)

Pre-PA SRU 3+2 (6SPP)

This program is effective as of Summer 2022

Revised 02.23.23

UCC 01.31.23

## Recommended Three-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
PSYC 105	Introduction to Psychology	3
ENGL 102	Critical Writing	3
STAT 152	Elementary Statistics I	3
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
LIBR 110	Introduction to Library & Information Resources	1
ESAP 101	FIRST Seminar *	1
<b>Hours</b>		<b>18</b>
<b>Spring</b>		
PSYC 231	Psychological Science I: Research Methods	3
ENGL 104	Critical Reading	3
PSYC 244	Developmental Psychology	3
BIOL 250	Genetics with Lab	4
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>

### Second Year

#### Fall

PSYC 276	Introduction to Abnormal Psychology	3
PSYC 232	Psychological Science II: Statistical Applications	3
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
BIOL 216	Anatomy and Physiology I with Lab	3
Humanities Inquiry (p. 29)		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>16</b>

#### Spring

PSYC 420	Community Service Practicum in Psychology	3
PSYC Elective #1		3
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
BIOL 217	Anatomy and Physiology II with Lab	3
Civil Discourse Requirement - select one		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
<b>Hours</b>		<b>16</b>

### Third Year

#### Fall

PSYC Elective #2		3
PSYC Elective #3		3
CHEM 201	Organic Chemistry I	3
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>18</b>

#### Spring

PSYC 311	Introduction to Behavioral Neuroscience	4
PSYC Elective #4		3
BIOL 210 or BIOL 330	Medical Microbiology with Lab or Microbiology/Lab	3
EXSC 250	Medical Terminology	3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Total Hours**</b>		<b>100</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6170

Concentration Code: 6SPP

Revised 05.25.2022

## Psychology, Bachelor of Science (BS) / Pre-Student Affairs (SRU) (3+2)

The Psychology program offers a Pre-Student Affairs 3+2 option for students interested in a career in Student Affairs. Undergraduate students work with their academic adviser to complete courses needed to fulfill the requirements for both a Bachelor of Science degree and the entrance requirements for the Master of Arts in Student Affairs program. Careers in Student Affairs involve counseling-focused positions at colleges and universities, including mental health counseling as well as those in housing and residence life, career services, student activities, multicultural services, academic advising, etc. It is a specialized program that prepares students for graduate study by providing a strong basis in the biopsychosocial processes of human functioning. The first year of the Master of Arts in Student Affairs program meets the requirements for the fourth year of the Bachelor of Science degree.

## Psychology (BS) - 3+2 Pre-Student Affairs

3+2 Pre-Student Affairs program requirements:

- Students are required to maintain minimum Overall and Psychology GPAs of 3.0 in order to retain the major in Psychology. Students are required to earn a grade of C or higher in Introduction to Psychology (PSYC 105) in order to take all other Psychology courses. Students are required to earn a grade of C or higher in Psychological Science I: Research Methods (PSYC 231) and Psychological Science II: Statistical Applications (PSYC 232) in order to progress in the program. Each course can only be repeated once.

## Program Learning Outcomes

- Theory and Content of Psychology:** Students should be familiar with the major theoretical approaches, findings, and historical trends in psychology.
- Methodology:** Students should understand and be able to use major research methods in psychology, including design, data analysis, and interpretation.
- Critical Thinking, Logic, and Problem-Solving:** Students should use and respect skeptical inquiry, critical thinking, and the scientific approach to understanding behavior.
- Information Competence, Technology, and Computers:** Students should demonstrate information competence and the ability to use computers and other technology for multiple purposes.
- Communication Skills:** Students should be able to express themselves effectively in written and oral communication.
- Application of Psychology:** Students should have an understanding of applications of psychology to personal, social, and organizational issues.

## Related Links

Psychology - Pre-Student Affairs, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/psychology-pre-student-affairs-32/>)

Psychology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/psychology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 3.0 or higher

Overall GPA: 3.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	42-44
	Electives	36

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the 1<sup>st</sup> year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15



**Thematic Thread**

Select 12 Credits (p. 29) <sup>2</sup>	12
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<b>Total Hours</b>	<b>42</b>
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<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

**Basic Math Requirement**

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

**Computer Competency**

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

**DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT**

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

**Major Requirements**

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above
- Overall, 48 credit hours must be completed at the 300 or 400 level
- Students who do not meet minimum standards will be dismissed from the program. All dismissals are permanent.

Code	Title	Hours
<b>Required Courses (Grade of 'C' or higher required) <sup>1</sup></b>		
Required Courses may only be repeated once.		
PSYC 105	Introduction to Psychology	3
PSYC 231	Psychological Science I: Research Methods	3
PSYC 232	Psychological Science II: Statistical Applications	3

PSYC 244	Developmental Psychology	3
PSYC 276	Introduction to Abnormal Psychology	3
PSYC 375	Psychopathology of Adulthood	3
Subtotal		18

**Applied Psychology Electives <sup>1</sup>**

Select two of the following:	6
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PSYC 208	Personality	
PSYC 304	Theories of Counseling	
PSYC 306	Introduction to Psychological Testing	
PSYC 318	Psychopathology of Childhood and Adolescence	
PSYC 320	Introduction to Clinical Psychology	
PSYC 475	Behavior Modification	
Subtotal		6

**Biobehavioral Elective <sup>1</sup>**

Select two of the following:	6-8
------------------------------	-----

PSYC 233	Sensation & Perception	
PSYC 289	Positive Psychology	
PSYC 303	Learning	
PSYC 311	Introduction to Behavioral Neuroscience	
PSYC 321	Drugs and Behavior	
PSYC 334	Health Psychology	
PSYC 338	Cognitive Psychology	
PSYC 471	Psychopharmacology	
PSYC 473	Hormones and Behavior	
PSYC 476	Clinical Neuroscience	
Subtotal		6-8

**Developmental Psychology Electives <sup>1</sup>**

Select two of the following:	6
------------------------------	---

PSYC 364	Child and Adolescent Development	
PSYC 365	Psychology of Aging	
PSYC 415	Multicultural Identity Development	
PSYC 428	Social and Emotional Development Across the Lifespan	
PSYC 445	Infant and Child Cognition	
PSYC 477	Developmental Neuroscience	
Subtotal		6

**Diversity Elective <sup>1</sup>**

Select one of the following:	3
------------------------------	---

PSYC 240	Human Sexual Behavior	
PSYC 300	Psychology of Women, Gender and Culture	
PSYC 315	Psychology of Sexual and Gender Diversity	
PSYC 392	Cross Cultural Psychology	
Subtotal		3

**Required Professional Competency <sup>1</sup>**

PSYC 420	Community Service Practicum in Psychology	3
or PSYC 430	Research Practicum in Psychology	

<b>Total Hours</b>	<b>42-44</b>
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<sup>1</sup> Courses count for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Electives

Code	Title	Hours
LIBR 110	Introduction to Library & Information Resources (REQUIRED)	1
PSYC 350	Contemporary Topics in Psychological Science (Course may be repeated for a total of 2 credits)	1

## Writing Competency Requirements

Code	Title	Hours
Writing in Psychology #1		
Writing in Psychology #2		
Writing in Psychology #3		
Writing in Psychology #4		

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International Study Programs
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership (Psi Chi, Psychology Club, Reflections Body Image Organization, Nu Rho Psi, Neuro Rocks)
5. Service-learning classes
6. Career education planning (Office of Career Education and Development)
7. Internships
8. Volunteering in local human services and mental health agencies
9. Job shadowing Volunteering

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

PSYCHOLOGY - BS (6170)

Pre-Student Affairs 3+2 (617S)

This program is effective as of Fall 2019.

Revised 09.10.20

UCC 02.18.20

## Recommended Three-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
PSYC 105	Introduction to Psychology	3
ENGL 102	Critical Writing	3
STAT 152	Elementary Statistics I	3
Creative & Aesthetic Inquiry (p. 29)		3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
LIBR 110	Introduction to Library & Information Resources	1
ESAP 101	FYRST Seminar *	1
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
PSYC 231	Psychological Science I: Research Methods	3
PSYC 276	Introduction to Abnormal Psychology	3
ENGL 104	Critical Reading	3
SCI 101	Science of Life	3
Humanities Inquiry (p. 29)		3
Free Electives		3
<b>Hours</b>		<b>18</b>
<b>Second Year</b>		
<b>Fall</b>		
PSYC 232	Psychological Science II: Statistical Applications	3
PSYC 244	Developmental Psychology	3
PSYC Elective #1		3
Civil Discourse Requirement - select one		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
SCI 102	Understanding the Physical World	3
Thematic Thread Requirement (p. 29)		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>18</b>
<b>Spring</b>		
PSYC Elective #2		3-4
PSYC Elective #3		3-4
PSYC Elective #4		3
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
Social Science Inquiry or Free Elective (if all other courses are 3 credits) (p. 29)		3
<b>Hours</b>		<b>18-20</b>
<b>Third Year</b>		
<b>Fall</b>		
PSYC 375	Psychopathology of Adulthood	3
PSYC Elective #5		3
PSYC Elective #6		3
PSYC Elective #7		3
Thematic Thread Requirement (p. 29)		3

Free Elective (if needed)		3
	<b>Hours</b>	<b>18</b>
<b>Spring</b>		
PSYC 420 or PSYC 430	Community Service Practicum in Psychology or Research Practicum in Psychology	3
Free Elective		3
Free Elective		3
Free Elective		3
	<b>Hours</b>	<b>12</b>
	<b>Total Hours**</b>	<b>101-103</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6170

Concentration Code: 617S

Revised: 09.21.20

## Psychology, Bachelor of Science (BS) / Psychology w/ Chatham University (MAP), Accelerated

The accelerated concentration within the Psychology (BS) will prepare students for the Master of Arts in Psychology (MAP) at Chatham University. The accelerated concentration is designed to give students an opportunity to enrich their undergraduate education with an intensive program in psychology and facilitate their entry into the M.A. in Psychology at Chatham University. The course work is tailored to meet the needs of the student as both a Psychology major and in deepening their understanding of psychological science and theories.

The following are Psychology Chatham MAP accelerated requirements. If any of the following criteria are not satisfied, the concentration designation will be removed from the student's record:

1. A minimum of a grade of C in each psychology course
2. A cumulative GPA of 3.5 or better on a 4.0 scale
3. All Psychology required courses taken through SRU, except Introduction to Psychology
4. Required Professional Competency must be taken through SRU
5. Psychology elective courses may be transferred
6. Recommended that the student meet with a faculty member from Chatham University (either in person, by phone or by email) during their sophomore or junior year

## Program Learning Outcomes

- **Theory and Content of Psychology:** Students should be familiar with the major theoretical approaches, findings, and historical trends in psychology.
- **Methodology:** Students should understand and be able to use major research methods in psychology, including design, data analysis, and interpretation.
- **Critical Thinking, Logic, and Problem-Solving:** Students should use and respect skeptical inquiry, critical thinking, and the scientific approach to understanding behavior.
- **Information Competence, Technology, and Computers:** Students should demonstrate information competence and the ability to use computers and other technology for multiple purposes.
- **Communication Skills:** Students should be able to express themselves effectively in written and oral communication.
- **Application of Psychology:** Students should have an understanding of applications of psychology to personal, social, and organizational issues.

## Related Links

Psychology - Chatham MAP Accelerated, BS Program Page ([https://www.sru.edu/academics/majors-and-minors/psychology-pre-psychology-\(map\)-with-chatham-university/](https://www.sru.edu/academics/majors-and-minors/psychology-pre-psychology-(map)-with-chatham-university/))

Psychology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/psychology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 3.0 or higher

Overall GPA: 3.5 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Writing Competency Requirements	
	Major Requirements	49-50
	Electives	29

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	

PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this

requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 25 major credits must be taken at SRU or PASSHE
- 25 major credits must be at the 300 level or above
- Overall, 48 credit hours must be completed at the 300 or 400 level
- Students who do not meet minimum standards will be dismissed from the program. All dismissals are permanent

Code	Title	Hours
<b>Required Courses (Grade of 'C' or higher required) <sup>1</sup></b>		
Required Courses may only be repeated once.		
PSYC 105	Introduction to Psychology	3
PSYC 231	Psychological Science I: Research Methods	3
PSYC 232	Psychological Science II: Statistical Applications	3
PSYC 244	Developmental Psychology	3
PSYC 276	Introduction to Abnormal Psychology <sup>2</sup>	3
PSYC 311	Introduction to Behavioral Neuroscience	4
PSYC 375	Psychopathology of Adulthood	3
Subtotal		22

### Applied Psychology Electives <sup>1</sup>

Select two of the following:		6
PSYC 208	Personality	
PSYC 304	Theories of Counseling	
PSYC 306	Introduction to Psychological Testing	
PSYC 318	Psychopathology of Childhood and Adolescence	
PSYC 320	Introduction to Clinical Psychology	
PSYC 475	Behavior Modification	

### Behavioral Elective <sup>1</sup>

Select one of the following:		3-4
PSYC 233	Sensation & Perception	
PSYC 289	Positive Psychology	
PSYC 303	Learning	
PSYC 321	Drugs and Behavior	
PSYC 334	Health Psychology	
PSYC 338	Cognitive Psychology	
PSYC 471	Psychopharmacology	
PSYC 473	Hormones and Behavior	
PSYC 476	Clinical Neuroscience	

### Developmental Psychology Electives <sup>1</sup>

Select two of the following:		6
PSYC 364	Child and Adolescent Development	
PSYC 365	Psychology of Aging	
PSYC 415	Multicultural Identity Development	
PSYC 477	Developmental Neuroscience	

### Diversity Electives <sup>1</sup>

Select one of the following:		3
PSYC 240	Human Sexual Behavior	
PSYC 300	Psychology of Women, Gender and Culture	
PSYC 315	Psychology of Sexual and Gender Diversity	
PSYC 392	Cross Cultural Psychology	

**Required Professional Competency<sup>1</sup>**

PSYC 450	Field Placement Internship in Psychology	6
PSYC 485	Senior Integration Seminar	3
<b>Total Hours</b>		<b>49-50</b>

<sup>1</sup> Courses count for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**Electives**

Code	Title	Hours
PSYC 350	Contemporary Topics in Psychological Science (Course may be repeated for a total of 2 credits)	1

**Writing Competency Requirements**

Code	Title	Hours
Writing in Psychology #1		
Writing in Psychology #2		
Writing in Psychology #3		
Professional Competencies Paper		

**Co-curricular and Experiential Learning**

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International Study Programs
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership (Psi Chi, Psychology Club, Reflections Body Image Organization, Nu Rho Psi, Neuro Rocks)
5. Service-learning classes
6. Career education planning (Office of Career Education and Development)
7. Internships
8. Volunteering in local human services and mental health agencies
9. Job shadowing Volunteering

**Important Curriculum Guide Notes**

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

PSYCHOLOGY - BS (6170)

Psychology with Chatham (MAP) (617B)

This program is effective as of Summer 2022

Revised 04.21.2022

UCC 02.15.2022

**Recommended Four-Year Plan**

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
PSYC 105	Introduction to Psychology	3
ENGL 102	Critical Writing	3
STAT 152	Elementary Statistics I	3
Creative & Aesthetic Inquiry (p. 29)		3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
LIBR 110	Introduction to Library & Information Resources	1
ESAP 101	FIRST Seminar *	1
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
PSYC 231	Psychological Science I: Research Methods	3
ENGL 104	Critical Reading	3
PSYC 276	Introduction to Abnormal Psychology	3
Humanities Inquiry (p. 29)		3
SCI 101	Science of Life	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
PSYC 232	Psychological Science II: Statistical Applications	3
PSYC 244	Developmental Psychology	3
PSYC Elective #1		3
SCI 102	Understanding the Physical World	3
Civil Discourse Requirement - select one		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
PSYC Elective #2		3
PSYC Elective #3		3
PSYC Elective #4		3
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
PSYC 311	Introduction to Behavioral Neuroscience	4
PSYC Elective #5		4
PSYC Elective #6		3
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
PSYC 450	Field Placement Internship in Psychology	6



PSYC 485	Senior Integration Seminar	3
PSYC 375	Psychopathology of Adulthood	3
Free Elective		3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>94</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6170

Concentration Code: MAP (617B)

Revised: 09.21.20

## Psychology, Minor

Admission to the minor is based on availability of seats and students must declare the minor by the 1st semester of their Junior year. A grade of B or higher in Introduction to Psychology is required to declare and/or maintain the Minor.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Psychology, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/psychology/>)

Psychology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/psychology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Admissions Requirements

*Admission to the Psychology Minor is by application and approval only.*

- Must apply by Junior I status
- Must complete Introduction to Psychology with a grade of a "B" or higher to apply.
- Must submit the Psychology Minor Application form to the Psychology Department chair.
- Qualified students are admitted to the minor only as slots become available.

### Minor Requirements

- Students must complete at least 9 credit hours in their minor from SRU

- A minimum of 9 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits
- Student must maintain a Psychology GPA of 2.0 at all times
- Students who do not meet minimum standards will be dismissed from the program. All dismissals are permanent

Code	Title	Hours
<b>Required Courses</b>		
PSYC 105	Introduction to Psychology <sup>1</sup>	3
<b>Core Electives</b>		
Select five courses, nine credits at 300 level or higher:		15
PSYC 205	Environmental Psychology	
PSYC 208	Personality	
PSYC 233	Sensation & Perception	
PSYC 240	Human Sexual Behavior	
PSYC 244	Developmental Psychology	
PSYC 276	Introduction to Abnormal Psychology	
PSYC 300	Psychology of Women, Gender and Culture	
PSYC 302	Psychology of Criminal Behavior	
PSYC 310	Introduction to Industrial-Organizational Psychology	
PSYC 315	Psychology of Sexual and Gender Diversity	
PSYC 321	Drugs and Behavior	
PSYC 360	History of Psychology	
PSYC 364	Child and Adolescent Development	
PSYC 377	Social Psychology	
PSYC 475	Behavior Modification	
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> Students must earn a grade of "B" or higher in Introduction to Psychology to be admitted into the program. The course can only be repeated once.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN PSYCHOLOGY (70A)

This program is effective as of Fall 2017.

UCC 03.05.20

Revised 10.28.2021

## Public Health

Chair	Secretary	Location	Department Phone
Dr. Adelle Williams	TDB	111 Dinger Building	724-738-2705

Department Web Site URL (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/public-health/>)

Department Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/publichealth-fs.pdf>)

## Faculty

### Nikhil Ahuja

Assistant Professor  
Public Health

M.D.S., Rajiv Gandhi University  
B.D.S., Maharashtra University

### Adaeze Aroh

Assistant Professor  
Public Health

D.P.H., University of Kentucky  
M.S., Northern Kentucky University  
B.S., University of Nigeria

### Tarek Eshak

Assistant Professor  
Public Health

M.P.H., Vu University  
M.B.B.Ch., Cairo University

### Marcy Leeds

Professor  
Public Health  
Ph.D., Rutgers University  
M.S., Case Western Reserve University  
R.D., American Dietetic Association  
B.S., Montclair State University

### Joseph Robare

Associate Professor  
Public Health  
D.P.H., University of Pittsburgh  
M.S., Indiana University of Pennsylvania  
B.S., University of Massachusetts

### Alexander Ufelle

Associate Professor  
Public Health  
Ph.D., University of Pittsburgh  
M.P.H., Western Kentucky University  
M.B.B.S., Nnamdi Azikiwe University

### Adelle Williams

Professor  
Public Health  
Ph.D., University of Pittsburgh  
M.Ed., University of Pittsburgh  
B.A., University of Pittsburgh

## PROGRAMS

### MAJORS

- Health Science - Public Health, Bachelor of Science (BS) (p. 718)
- Health Science - Public Health, Bachelor of Science (BS) / Pre-Occupational Therapy (SRU) (3+3) (p. 721)
- Health Science - Public Health, Bachelor of Science (BS) / Pre-Occupational Therapy (SRU) (Traditional) (p. 725)
- Health Science - Public Health, Bachelor of Science (BS) / Pre-Physical Therapy (SRU) (3+3) (p. 729)
- Health Science - Public Health, Bachelor of Science (BS) / Pre-Physical Therapy (SRU) (Traditional) (p. 732)
- Health Science - Public Health, Bachelor of Science (BS) / Pre-Physician Assistant (SRU) (3+2) (p. 736)
- Health Science - Public Health, Bachelor of Science (BS) / Pre-Physician Assistant (SRU) (Traditional) (p. 739)

### MINORS

- Gerontology, Minor (p. 717)
- Public Health, Minor (p. 743)

## Courses

### GERO Courses

#### GERO 139 - Foundations of Academic Discovery

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

#### GERO 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

#### GERO 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**GERO 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**GERO 265 - Aging and the Older Person**

Introduction to the interdisciplinary study of gerontology as a social, behavioral and biological science. A prerequisite to courses in gerontology and aging. Women and Aging examines the effects of women growing older in a changing society. Social, psychological, physical, economic, cultural, and political implications will be discussed, including health concerns, changing roles, and discrimination.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1 may **not** enroll.

**GERO 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1 may **not** enroll.

**GERO 295 - Workbook**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1 may **not** enroll.

**GERO 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1 may **not** enroll.

**GERO 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GERO 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GERO 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GERO 414 - Death and Dying**

This course is an introduction to the study of death, dying and bereavement which utilizes a multidisciplinary approach. This course is aimed at sensitizing students to the subject of dying, death and bereavement, aiding students in adjusting to the death of a significant other, helping students examine their feeling and reactions to death and grieving and introducing students to diverse perspectives.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GERO 425 - Women and Aging**

Examines the effects of women growing older in a changing society. Social, psychological, physical, economic, cultural, and political implications will be discussed, including health concerns, changing roles, and discrimination.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**GERO 450 - Gerontology Internship**

Individually designed experiential learning intended to provide the student with an opportunity for observation and participation in a wide range of gerontological activities in an approved institution or agency setting.

Credits: 3-12

Term(s) Typically Offered: Offered Every Term

Students with a semester level of Freshman 1, Freshman 2, Junior 1, Sophomore 1 or Sophomore 2 may **not** enroll.

**GERO 465 - Seminar in Gerontology**

An interdisciplinary investigation of selected facets of gerontology. Course content is drawn from the biological, behavioral, and social sciences, and it will include a consideration of current issues in such areas as mental health, housing, economics, transportation, preventive health program, long-term care, and leisure work activities.

Prerequisite: GERO 265<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**GERO 490 - Independent Study**

A rigorous investigation of a topic of relevance to gerontology not covered in detail in existing courses. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**GERO 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**GERO 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

## HLTH Courses

**HLTH 100 - Introduction to Health Careers**

Provides students with an understanding of various career opportunities in health and safety occupations and the opportunity to determine whether their needs, interests, abilities, and values are suited to careers in this area.

Credits: 3

**HLTH 101 - Personal Health**

Addresses concerns pertaining to college living and life-long health. Emphasizes wellness with its emotional, physical, and social components.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course

**HLTH 102 - Health Appraisal and Promotion**

Discusses the role of wellness in health promotion. Identifies major health risks and examines primary prevention strategies utilizing select health appraisal instruments for the promotion of optimal individual and community health. Exposes students to agencies, which serve as resources for health information.

Credits: 3

**HLTH 103 - Health and Behavior Change**

Examines the major health problems and health risks to determine feasible secondary and tertiary intervention strategies to maintain, promote and manage the highest possible level of individual and community health. Explores behaviors and circumstances that are barriers to seeking and/or adhering to medical advice.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment is limited to students with a program in Public Health, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

**HLTH 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**HLTH 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HLTH 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**HLTH 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HLTH 203 - Public Health and Physical Activity**

This course will focus on introducing public health students to the benefits of physical activity (PA), how to safely engage in PA and how to apply PA to the public health model.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment is limited to students with a program in Public Health or Health Science - Public Health.

**HLTH 210 - Introduction to Public Health**

Provides a broad foundation of information related to the structure and functioning of the community health system including the identification and examination of programs, providers, and current problems associated with the delivery of health services.

Credits: 3

Term(s) Typically Offered: Offered Fall, Winter, & Spring

Enrollment is limited to students with a program in Public Health, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

**HLTH 211 - Women's Health Issues**

Examines the role of women as consumers and as both formal and informal providers of health services.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

**HLTH 262 - Health Foundations**

Identifies and examines the major health problems at the individual and community level. Emphasizes health information and resources that can be used to deliver developmentally appropriate primary, secondary and tertiary education and/or interventions among diverse populations.

Credits: 3

Enrollment is limited to students with a program in Exploratory Physical Educ, School Wellness Education, Health-Physical Educ Teaching, Public Health, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

**HLTH 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HLTH 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**HLTH 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HLTH 301 - Introduction to Health Education**

Examines the knowledge and skills necessary to function effectively as a community, school, or worksite health educator. Emphasizes the responsibilities and competencies of the Certified Health Education Specialist.

Prerequisites: HLTH 103<sup>D</sup> and HLTH 210<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Public Health, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

**HLTH 309 - Introduction to the Study of Disease**

Provides a broad foundation of information related to the etiology, pathophysiological mechanisms, signs and symptoms, outcomes and current therapies for selected communicable, genetic, and chronic diseases.

Prerequisite: BIOL 216<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Winter Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Public Health, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

**HLTH 310 - Environmental Health**

Explores the ecologic, economic, ethical, toxicologic and epidemiologic bases for environmental health both globally and within the community setting. Emphasizes the relationship between biological, physical and chemical agents and disease/injury causation and the role of government.

Prerequisites: CHEM 104<sup>D</sup> or CHEM 107<sup>D</sup> or BIOL 210<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring & Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Public Health, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

**HLTH 311 - International Health**

Examines significant health problems affecting populations in various areas of the world. Provides opportunities to understand approaches to health from different cultural perspectives and focuses on the integration of disease patterns in peoples within specific geographic areas. Emphasizes interdisciplinary perspectives on how cultural diversity relates to us and the world community.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HLTH 312 - Data Management for Health Science**

Explores methods of data collection, manipulation and reporting for health science. Includes computer applications.

Prerequisites: MATH 152<sup>D</sup> or STAT 152<sup>D</sup> or MATH 114<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Public Health, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.



**HLTH 313 - Biostatistics**

Provides a broad foundation of knowledge related to data analysis in health science. Emphasizes the interpretation of health data and the computer skills for common statistical methods.

Prerequisites: HSAF 312<sup>D</sup> or HLTH 312<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Public Health, Exercise Science, Exercise Sci- Pre PT-SRU 3+3, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

**HLTH 314 - Nutrition and Health**

Examines basic scientific principles of nutrition, specifically all major nutrient classes in terms of functions, food sources, and adequate intakes along with sensitivity to diverse needs throughout the life cycle. Emphasizes interdisciplinary perspectives on how cultural diversity relates to food choices and how unique ethnic health challenges influence dietary needs.

Credits: 3

Term(s) Typically Offered: Offered Fall & Winter Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Public Health, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

**HLTH 316 - Human Sexuality**

Surveys a broad range of information about human sexuality from biological, psychological, sociological, religious, and medical perspectives.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HLTH 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HLTH 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HLTH 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HLTH 406 - Program Planning and Evaluation**

Provides basic proficiency in quantitative and qualitative approaches to health education and health promotion program measurement and evaluation. Current trends and issues in community, school and worksite health promotion are brought to bear on the problems of implementing and interpreting the results of formative and summative evaluation.

Prerequisite: HLTH 301<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Public Health, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

**HLTH 408 - Public Health Administration**

This course is designed to give an overview of the context, infrastructure and core functions of public health systems and related administration. It focuses on the administrative aspects for carrying out the public health functions, and the legal, ethical, economic, management, leadership, and regulatory dimensions of public health systems. This course also addresses performance measures, strategic planning, information systems, and current issues or trends in public health.

Prerequisite: HLTH 210<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Public Health or Health Science - Public Health.

**HLTH 410 - Epidemiology**

Introduces the study of population-based research and statistical methods of inquiry regarding distribution and determination of disease in human populations. Emphasizes appropriate study design and investigative techniques and interpretation of findings related to community health. Prerequisites: HLTH 313 Biostatistics or taking HLTH 313 Biostatistics concurrently.

Prerequisite: HLTH 313 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring & Summer Terms

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Public Health, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

**HLTH 424 - Nutrition and Exercise**

This course provides an understanding of the dietary standards that dictate nutritional requirements for apparently healthy adults. Emphasis is placed on the evaluation of an recommendations for macronutrients, micronutrients, and hydration status for health, physical activity, and human performance.

Prerequisites: (HLTH 314<sup>D</sup> or ERS 300<sup>D</sup>) and ERS 301<sup>D</sup> and ERS 302<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Exercise Science, Exercise Sci- Pre PT-SRU 3+3 or Athletic Training.

Enrollment limited to students in the BS 6149 or BS 6204 programs.

**HLTH 440 - Public Health Seminar**

This course is designed to provide a critical analysis of the major contemporary public health problems facing persons and communities. Content will also address professionalism and career advancement in the public health professions.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Public Health, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

**HLTH 450 - Internship**

Provides opportunity to apply theory and develop competencies through a work-related experience in an appropriate cooperating enterprise. Summers only.

Credits: 1-12

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a major in Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

**HLTH 455 - Student Teaching - Health Science**

Under the guidance of a cooperating teacher and university supervisor, students engage in two, eight week assignments on a full-time basis in specified school districts and attend scheduled seminars. Supervisors assign additional requirements.

Credits: 3-12

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HLTH 490 - Independent Study**

Students study under the supervision of a professor on a specific and significant topic. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HLTH 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HLTH 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Gerontology, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

**Coordinator**

Adelle Williams

Gerontology is an interdisciplinary specialization that focuses on aging and the aging process. This specialization is designed to enhance the understanding of aging and enrich interactions among generations. It is a valuable adjunct for those preparing to work directly with, or indirectly for, older persons. Employment opportunities for students who have academic preparation in gerontology are available in community agencies, long term care facilities, hospitals, assisted living facilities, hospices, retirement villages, senior centers, and mental health facilities among others. The program is open to students in any major.

Students conduct an internship in an organization which provides services to older adults and students actively participate in a service learning project. Opportunities to participate in campus and community activities are available.

Sigma Phi Omega, the national gerontology honorary society recognized students' exemplary scholastic accomplishments in the field of aging. Undergraduate and graduate students are eligible to apply. The Anne Bicknell Scholarship is offered (based upon available funding) and an application, essay and references are required.

## ADVISEMENT

Students planning to complete the program in gerontology will declare a major within a department. Major responsibility for advisement will rest within this department. However, the coordinator will assist students in the selection of gerontology courses and internship sites to fulfill the requirements for the minor in gerontology. Students must assume responsibility for fulfilling all requirements for graduation.

## RELATED LINKS

Gerontology, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/gerontology-minor/>)

Public Health Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/public-health/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Minor GPA: 2.0 or higher

### MINOR REQUIREMENTS

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Courses</b>		
Student must complete at least one content course from each block below, plus two additional courses from any of the three blocks.		15
<i>Gerontology Courses</i>		
GERO 265	Aging and the Older Person (Required)	
GERO 425	Women and Aging	
GERO 465	Seminar in Gerontology	
GERO 490	Independent Study	
<i>Health/Science Courses</i>		
HLTH 314	Nutrition and Health	
NURS 498	Selected Topics	
PE 364	Biomechanics of Individuals with Disabilities	
EXSC 434	Physiology of Aging and Physical Activity	
RCTH 420	Recreational Therapy for Older Adults	
<i>Psychology/Sociology Courses</i>		
GERO 414	Death and Dying	
PSYC 365	Psychology of Aging	
INDP 342	Sociology of Aging	
<b>Internship</b>		
GERO 450	Gerontology Internship (Required) <sup>1</sup>	3
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> Prerequisite – must have 9 hours of GERO courses

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

### MINOR IN GERONTOLOGY (98A)

This program is effective as of Summer 2013.

Revised 10.28.2021

## Health Science - Public Health, Bachelor of Science (BS)

Slippery Rock University's Public Health Program is well known for the quality of its graduates. Public Health majors are successful at continuing on into graduate programs in the field of health science and finding jobs in a variety of health-related professions.

Public Health is a discipline in which professionals deliver health information and health programs for health promotion and disease prevention to populations. Graduates of this program have a broad based background in the field of public health that prepares them for graduate study in a health-related field along with entry level positions in such areas as health promotion, health education, and health data management.

The Public Health program is very dynamic. Coursework involves service learning experiences within a wide variety of settings. Public Health faculty members conduct on-going research projects in which advanced level students can become involved. Students help professors analyze data and prepare professional conference presentations, which the students actually present under the mentorship of faculty members. Other student activities include the Pennsylvania Public Health Association Collegiate Chapter and the peer health education program at Slippery Rock University.

Students are encouraged to take additional coursework or minors in complementary areas of study such as gerontology, information systems, or psychology. The program culminates in a 12-credit internship, which provides hands-on experiences and further insight into career opportunities in public health. Students may select their own internship site or may choose from a database of previously identified sites. Often it is through this internship experience that students discover the branch of public health in which they would like to practice. Students are required to select a major project for their internship experience that demonstrates mastery of entry-level professional skills. Frequently interns remain at their sites as employees following their internships.

Recent graduates have entered positions in state and local health departments, community-based wellness programs, voluntary health agencies such as the American Heart Association or American Cancer Society, federal government health programs, and health insurance companies. Graduates also enter graduate programs in a variety of areas. Many continue their studies to become physician assistants, occupational or physical therapists, nutritionists, and nurses. Others choose to earn a graduate degree in public health.

Upon completion of the Public Health program, students are eligible to sit for the Certified Health Education Specialist (CHES) examination, which is a national credentialing examination for people who wish to practice health education in a community setting. Today, the CHES credential is often preferred or even required for many community health education positions. Graduates who complete our Public Health program successfully pass the CHES examination at a rate well above the national average.

## PROGRAM LEARNING OUTCOMES

- **Effective Professional Communication:** Communicate with clients in an individual or group setting and with health professionals in a variety of health settings using a combination of communication skills for a clear exchange of ideas and information, listening and comprehending the viewpoints of others, effectively presenting information in oral and written formats and integrating media/technology.
- **Professional Competency:** Use reasoned judgment drawing upon a broad knowledge base from social, behavioral and natural science, education and health to assess, plan, implement, evaluate and coordinate health promotion for individuals and communities.
- **Professional Ethics:** Apply high ethical standards to public health practice with a sensitivity to multicultural traditions, legal issues, and adherence to a code of ethics of professional health organizations.
- **Continual Professional and Personal Development:** Continue personal and professional development in holistic health, including the components of physical, emotional, spiritual, social, environmental and vocational health, through continuing education, advanced study, and participation in professional health organizations

## RELATED LINKS

Public Health, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/public-health/>)

Public Health Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/public-health/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

#### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	43
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	60
	Natural Science and Math College-Wide Requirements	12
	Electives	17

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
	<b>The Rock</b>	
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
	Select one of the following:	3

COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
	<b>Subtotal</b>	<b>15</b>
	<b>Integrated Inquiry</b>	
	<i>Creative and Aesthetic Inquiry</i>	
	Select 3 Credits (p. 29)	3
	<i>Humanities Inquiry</i>	
	Select 3 Credits (p. 29)	3
	<i>Social Science Inquiry</i>	
	Select 3 Credits (p. 29)	3
	<i>Natural Sciences Inquiry</i>	
	Select one of the following:	3
BIOL 110	The Human Body: Fundamentals of Structure and Physiology	
BIOL 216	Anatomy and Physiology I with Lab	
	<i>Physical Sciences Inquiry</i>	
	Select one of the following:	4
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	
PHYS 201	Elements of Physics I with Lab	
SCI 102	Understanding the Physical World	
	<b>Subtotal</b>	<b>16</b>
	<b>Thematic Thread</b>	
	Select 12 Credits (p. 29) <sup>2</sup>	12
	<b>Total Hours</b>	<b>43</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
	Complete one of the following:	0-3
	Meet required minimum SAT or ACT math score OR	
ESAP 110	Beginning Algebra	
	<b>Total Hours</b>	<b>0-3</b>

### Computer Competency

Code	Title	Hours
	Demonstrate "computer competency" by one of the following:	0-3
	Pass Computer Competency Exam OR	
	Select one of the following at SRU or another post-secondary institution:	
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	

CPSC 130	Introduction to Computing and Programming
PE 202	Technology for Wellness
<hr/>	
<b>Total Hours</b>	<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## MAJOR REQUIREMENTS

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Courses in Public Health</b>		
HLTH 103	Health and Behavior Change <sup>1</sup>	3
HLTH 210	Introduction to Public Health <sup>1</sup>	3
HLTH 301	Introduction to Health Education <sup>1</sup>	3
HLTH 309	Introduction to the Study of Disease <sup>1</sup>	3
HLTH 310	Environmental Health <sup>1</sup>	3
HLTH 311	International Health <sup>1</sup>	3
HLTH 312	Data Management for Health Science <sup>1</sup>	3
HLTH 313	Biostatistics <sup>1</sup>	3
HLTH 314	Nutrition and Health <sup>1</sup>	3
HLTH 406	Program Planning and Evaluation <sup>1</sup>	3
HLTH 410	Epidemiology <sup>1</sup>	3
HLTH 440	Public Health Seminar <sup>1</sup>	3
Subtotal		36
<b>Required Internship</b>		
HLTH 450	Internship <sup>1</sup>	12
Subtotal		12
<b>Required Course outside of Major Department</b>		
BIOL 210	Medical Microbiology with Lab <sup>3</sup>	3
Subtotal		3
<b>Supporting Coursework:</b>		
Select three courses from the list below:		9
GERO 265	Aging and the Older Person <sup>2</sup>	
GERO 414	Death and Dying <sup>2</sup>	
HCAM 230	US Healthcare Systems <sup>2</sup>	
HLTH 203	Public Health and Physical Activity <sup>2</sup>	
HLTH 211	Women's Health Issues <sup>2</sup>	
HLTH 316	Human Sexuality <sup>2</sup>	
HLTH 408	Public Health Administration	
Subtotal		9
<b>Total Hours</b>		<b>60</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> Course counts for 50% of Major requirements but not for Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## NATURAL SCIENCE AND MATH COLLEGE-WIDE REQUIREMENTS

Code	Title	Hours
Must complete 9-10 credits (CHEM 111 is required if completing CHEM 107):		
BIOL 216	Anatomy and Physiology I with Lab	3
CHEM 107	General Chemistry I	3-4
& CHEM 111	and General Chemistry I Lab	
or CHEM 104	Introduction Chemistry I	
STAT 152	Elementary Statistics I	3

## CO-CURRICULAR AND EXPERIENTIAL LEARNING

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Conference attendance
2. Service-Learning
3. Internships
4. Career Education
5. Peer Education Opportunities

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

HEALTH SCIENCE - PUBLIC HEALTH (6266)

This program is effective as of Summer 2022

Revised 04.25.2022

UCC 02.15.2022

## RECOMMENDED FOUR-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
HLTH 103	Health and Behavior Change	3
CHEM 104	Introduction Chemistry I	3
ENGL 102	Critical Writing	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ESAP 101	FYRST Seminar <sup>*</sup>	1
<b>Hours</b>		<b>13</b>
<b>Spring</b>		
CPSC 100	Introduction to Computing for Liberal Arts <sup>3</sup>	1
ENGL 104	Critical Reading	3
SCI 102	Understanding the Physical World	3
Creative & Aesthetic Inquiry (p. 29)		3



Humanities Inquiry (p. 29)	3
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<b>Hours</b>	<b>13</b>
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**Second Year****Fall**

HLTH 210	Introduction to Public Health	3
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BIOL 110	The Human Body: Fundamentals of Structure and Physiology	3
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STAT 152	Elementary Statistics I	3
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Social Science Inquiry (p. 29)		3
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Thematic Thread Requirement (p. 29)		3
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Declare a Thematic Thread <sup>2</sup>		
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<b>Hours</b>	<b>15</b>
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**Spring**

HLTH 301	Introduction to Health Education	3
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Select one of the following:		3
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COMM 200	Civil Discourse: Theory & Practice	
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PHIL 110	Ethics and Civil Discourse	
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POLS 235	Civil Discourse and Democracy	
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Thematic Thread Requirement (p. 29)		3
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Thematic Thread Requirement (p. 29)		3
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Thematic Thread Requirement (p. 29)		3
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<b>Hours</b>	<b>15</b>
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**Third Year****Fall**

HLTH 309	Introduction to the Study of Disease	3
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HLTH 312	Data Management for Health Science	3
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HLTH 314	Nutrition and Health	3
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BIOL 210	Medical Microbiology with Lab	3
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<b>Hours</b>	<b>12</b>
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**Spring**

HLTH 310	Environmental Health	3
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HLTH 311	International Health	3
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HLTH 313	Biostatistics	3
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Public Health Supporting Course		3
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<b>Hours</b>	<b>12</b>
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**Fourth Year****Fall**

HLTH 406	Program Planning and Evaluation	3
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Public Health Supporting Course		3
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Free Electives		9
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<b>Hours</b>	<b>15</b>
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**Winter****Potential On-line Winter Courses**

International Health		
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<b>Hours</b>	<b>0</b>
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**Spring**

HLTH 410	Epidemiology	3
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HLTH 440	Public Health Seminar	3
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Public Health Supporting Course		3
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Free Electives		4
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<b>Hours</b>	<b>13</b>
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**Summer**

HLTH 450	Internship	12
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**Potential On-line Summer Courses**

International Health/Women's Health Issues		
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<b>Hours</b>	<b>12</b>
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<b>Total Hours**</b>	<b>120</b>
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<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>3</sup> If you enter Fall 2021 or later and do not pass the Computer Competency exam.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6266

Revised: 01.18.2023

## Health Science - Public Health, Bachelor of Science (BS) / Pre-Occupational Therapy (SRU) (3+3)

### PUBLIC HEALTH PROGRAM LEARNING OUTCOMES

- **Effective Professional Communication:** Communicate with clients in an individual or group setting and with health professionals in a variety of health settings using a combination of communication skills for a clear exchange of ideas and information, listening and comprehending the viewpoints of others, effectively presenting information in oral and written formats and integrating media/technology.
- **Professional Competency:** Use reasoned judgment drawing upon a broad knowledge base from social, behavioral and natural science, education and health to assess, plan, implement, evaluate and coordinate health promotion for individuals and communities.
- **Professional Ethics:** Apply high ethical standards to public health practice with a sensitivity to multicultural traditions, legal issues, and adherence to a code of ethics of professional health organizations.
- **Continual Professional and Personal Development:** Continue personal and professional development in holistic health, including the components of physical, emotional, spiritual, social, environmental and vocational health, through continuing education, advanced study, and participation in professional health organizations

## What are your options?

**Pre-Occupational Therapy SRU 3+3:** Earn a Doctor of Occupational Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU OTD program. At the end of your second year, you apply for admission into the SRU OTD program. If accepted, your first year in the SRU OTD program

meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Occupational Therapy (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU OTD program and apply to the SRU OTD program in your senior year.

## RELATED LINKS

Public Health - Pre-Occupational Therapy, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/public-health-pre-occupational-therapy/>)

Public Health Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/public-health/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

#### 1<sup>st</sup> Major: Public Health

- Overall GPA: 2.0 or higher
- Major GPA (only includes Health courses): 2.0 or higher

#### 2<sup>nd</sup> Major: Pre-OT SRU 3+3 Public Health

- Overall GPA: 3.00 or higher

### SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	42-43
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	30
	Natural Science and Math College-Wide Requirements	17
	Electives	48

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the 1<sup>st</sup> year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.

### ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
BIOL 216	Anatomy and Physiology I with Lab	3
<i>Physical Sciences Inquiry</i>		
Select one of the following:		3-4
PHYS 201	Elements of Physics I with Lab	
SCI 102	Understanding the Physical World	
Subtotal		15-16
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
Required Thematic Thread Coursework:		
EXSC 250	Medical Terminology	
PSYC 105	Introduction to Psychology	
<b>Total Hours</b>		<b>42-43</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## MAJOR REQUIREMENTS

- If you choose to pursue Pre-Occupational Therapy SRU 3+3 Public Health and are not accepted into the OTD program, then additional coursework is required to complete a first major of Public Health. Please refer to Public Health Curriculum Guide.

Code	Title	Hours
<b>Required Courses in Public Health</b>		
HLTH 103	Health and Behavior Change	3
HLTH 210	Introduction to Public Health	3
HLTH 301	Introduction to Health Education	3
HLTH 310	Environmental Health	3
HLTH 311	International Health	3
HLTH 312	Data Management for Health Science	3
HLTH 313	Biostatistics	3
HLTH 314	Nutrition and Health	3
HLTH 406	Program Planning and Evaluation	3
HLTH 410	Epidemiology	3
<b>Total Hours</b>		<b>30</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## NATURAL SCIENCE AND MATH COLLEGE-WIDE REQUIREMENTS

Code	Title	Hours
BIOL 216	Anatomy and Physiology I with Lab	3
BIOL 217	Anatomy and Physiology II with Lab	3
CHEM 104	Introduction Chemistry I	3
STAT 152	Elementary Statistics I	3
<b>Total Hours</b>		<b>12</b>

## ADDITIONAL OCCUPATIONAL THERAPY PREREQUISITE COURSES

Code	Title	Hours
EXSC 250	Medical Terminology	3
or HCAM 250	Medical Terminology for Healthcare Administrators	
INDP 318	Research Methods in Interdisciplinary Studies	3
or SOWK 318	Research Methods	
PHYS 201	Elements of Physics I with Lab	3-4
or PE 364	Biomechanics of Individuals with Disabilities	
PSYC 105	Introduction to Psychology	3
PSYC 244	Developmental Psychology	3
PSYC 276	Introduction to Abnormal Psychology	3
<b>Total Hours</b>		<b>18-19</b>

## CO-CURRICULAR AND EXPERIENTIAL LEARNING

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Conference attendance
2. Service-Learning
3. Internships
4. Career Education
5. Peer Education Opportunities

## Doctor of Occupational Therapy (OTD) Prerequisite Admission Requirements – Pre-Occupational Therapy SRU 3+3

### For Application Requirements

Please refer to Slippery Rock University's Occupational Therapy Studies (Master of Science in Occupational Therapy Studies) website for requirements: <http://www.sru.edu/OT> (<http://www.sru.edu/OT/>)

### Rock Studies 2

Code	Title	Hours
<b>Prerequisite Courses - SRU Occupational Therapy</b>		
BIOL 209		4
BIOL 309		4
EXSC 250	Medical Terminology	3
or HCAM 250	Medical Terminology for Healthcare Administrators	
PHYS 201	Elements of Physics I with Lab	4
or PE 364	Biomechanics of Individuals with Disabilities	
STAT 152	Elementary Statistics I	3
PSYC 105	Introduction to Psychology	3
PSYC 244	Developmental Psychology	3
PSYC 276	Introduction to Abnormal Psychology	3
Anthropology or Sociology <sup>1</sup>		3
INDP 106	Race and Ethnic Diversity in the USA	
INDP 202	Introduction to Anthropology	
INDP 211	Biological Anthropology	
INDP 309	Health and Society	
INDP 310	Cultural Area Studies	
INDP 321	Minority Groups	
INDP 324	The Family	
INDP 326	Society, Culture and Self	
INDP 339	Gender Roles and Society	
INDP 342	Sociology of Aging	
RCTH 120	Disability, Community Inclusion, and Diversity	
SOWK 105	Human Diversity	
Research Methods - Select One: <sup>1</sup>		3
EXSC 300	Research Methods in Exercise Science	
HCAM 499	Health Care Theory and Research Capstone Seminar	
INDP 318	Research Methods in Interdisciplinary Studies	
PSYC 231/232	Psychological Science I: Research Methods	

SOWK 318	Research Methods	
<b>Total Hours</b>		<b>33</b>

<sup>1</sup> Select one course. See *My Rock Audit* for specific courses.

### Pre-Occupational Therapy SRU 3+3

If any of these requirements are not met, the 3+3 designation will be removed from the student's record:

1. A 3.0 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Occupational Therapy SRU 3+3 program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

### Provision

Should a Pre-Occupational Therapy SRU 3+3 student be unsuccessful in completing the 1<sup>st</sup> two semesters (summer or fall) of the Occupational Therapy Program and wants to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, Occupational Therapy courses will count toward the completion of his/her undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the Doctor of Occupational Therapy Program with an earned Bachelor's degree.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

HEALTH SCIENCE PUBLIC HEALTH - BS (6266)

PRE-OT SRU 3+3 (6PHO)

This program is effective as of Summer 2022

Revised 07.01.2022

UCC 2.15.20122

## RECOMMENDED THREE-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
HLTH 103	Health and Behavior Change	3
CHEM 104	Introduction Chemistry I	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Creative & Aesthetic Inquiry (p. 29)		3
CPSC 100	Introduction to Computing for Liberal Arts <sup>3</sup>	1
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
PSYC 105	Introduction to Psychology	3

SCI 102	Understanding the Physical World	3
Humanities Inquiry (p. 29)		3
Social Science Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>

### Second Year

#### Fall

HLTH 210	Introduction to Public Health	3
BIOL 216	Anatomy and Physiology I with Lab	3
INDP 202 or SOWK 105	Introduction to Anthropology or Human Diversity	3
PSYC 244	Developmental Psychology	3
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29) **		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>18</b>

#### Spring

HLTH 301	Introduction to Health Education	3
BIOL 217	Anatomy and Physiology II with Lab	3
EXSC 250	Medical Terminology	3
PSYC 276	Introduction to Abnormal Psychology	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
<b>Hours</b>		<b>18</b>

### Third Year

#### Fall

HLTH 312	Data Management for Health Science	3
HLTH 314	Nutrition and Health	3
HLTH 406	Program Planning and Evaluation	3
INDP 318 or SOWK 318	Research Methods in Interdisciplinary Studies or Research Methods	3
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29) **		3
<b>Hours</b>		<b>18</b>

#### Winter

<b>Potential On-line Winter Courses</b>		
HLTH 311	International Health	0
EXSC 250	Medical Terminology	0
<b>Hours</b>		<b>0</b>

#### Spring

HLTH 310	Environmental Health	3
HLTH 311	International Health	3
HLTH 313	Biostatistics	3
HLTH 410	Epidemiology	3
PHYS 201 or PE 364	Elements of Physics I with Lab or Biomechanics of Individuals with Disabilities	3-4
<b>Hours</b>		<b>15-16</b>

### Summer

<b>Potential On-line Summer Courses</b>		
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HLTH 311	International Health	0
EXSC 250	Medical Terminology	0
<b>Hours</b>		<b>0</b>

**Fourth Year****Fall****If not admitted to SRU OTD Program**

HLTH 309	Introduction to the Study of Disease	3
BIOL 210	Medical Microbiology with Lab	3
3 Public Health Supporting Coursework courses		9
<b>Hours</b>		<b>15</b>

**Spring****If not admitted to SRU OTD Program**

HLTH 440	Public Health Seminar	3
HLTH 450	Internship (or summer after senior year)	12
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>131-132</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>3</sup> CPSC If you enter in Fall 2021 or later and do not pass the Computer Competency exam.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* You will already have if you declare a Thematic Thread Fall 2022 or later that includes PSYC 105 & Medical Terminology.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6266

Concentration Code: 6HPO

Revised 01.18.2023

## Health Science - Public Health, Bachelor of Science (BS) / Pre-Occupational Therapy (SRU) (Traditional)

### PUBLIC HEALTH PROGRAM LEARNING OUTCOMES

- Effective Professional Communication:** Communicate with clients in an individual or group setting and with health professionals in a variety of health settings using a combination of communication skills for a clear exchange of ideas and information, listening and comprehending the viewpoints of others, effectively presenting information in oral and written formats and integrating media/technology.
- Professional Competency:** Use reasoned judgment drawing upon a broad knowledge base from social, behavioral and natural science,

education and health to assess, plan, implement, evaluate and coordinate health promotion for individuals and communities.

- Professional Ethics:** Apply high ethical standards to public health practice with a sensitivity to multicultural traditions, legal issues, and adherence to a code of ethics of professional health organizations.
- Continual Professional and Personal Development:** Continue personal and professional development in holistic health, including the components of physical, emotional, spiritual, social, environmental and vocational health, through continuing education, advanced study, and participation in professional health organizations

## What are your options?

**Pre-Occupational Therapy SRU 3+3:** Earn a Doctor of Occupational Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU OTD program. At the end of your second year, you apply for admission into the SRU OTD program. If accepted, your first year in the SRU OTD program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Occupational Therapy (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU OTD program and apply to the SRU OTD program in your senior year.

## RELATED LINKS

Public Health - Pre-Occupational Therapy, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/public-health-pre-occupational-therapy/>)

Public Health Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/public-health/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### SUMMARY\*

Code	Title	Hours
Rock Studies 2 Requirements		42-43
Other Basic Requirements		0-3
Computer Competency		0-3
Major Requirements		60
Natural Science and Math College-Wide Requirements		12
Electives		17

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3



ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
BIOL 216	Anatomy and Physiology I with Lab	3
<i>Physical Sciences Inquiry</i>		
Select one of the following:		3-4
PHYS 201	Elements of Physics I with Lab	
SCI 102	Understanding the Physical World	
Subtotal		15-16
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
Required Thematic Thread Coursework:		
EXSC 250	Medical Terminology	
PSYC 105	Introduction to Psychology	
<b>Total Hours</b>		<b>42-43</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		

CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## MAJOR REQUIREMENTS

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Courses in Public Health</b>		
HLTH 103	Health and Behavior Change <sup>1</sup>	3
HLTH 210	Introduction to Public Health <sup>1</sup>	3
HLTH 301	Introduction to Health Education <sup>1</sup>	3
HLTH 309	Introduction to the Study of Disease <sup>1</sup>	3
HLTH 310	Environmental Health <sup>1</sup>	3
HLTH 311	International Health <sup>1</sup>	3
HLTH 312	Data Management for Health Science <sup>1</sup>	3
HLTH 313	Biostatistics <sup>1</sup>	3
HLTH 314	Nutrition and Health <sup>1</sup>	3
HLTH 406	Program Planning and Evaluation <sup>1</sup>	3
HLTH 410	Epidemiology <sup>1</sup>	3
HLTH 440	Public Health Seminar <sup>1</sup>	3
Subtotal		36
<b>Required Internship</b>		
HLTH 450	Internship <sup>1</sup>	12
Subtotal		12
<b>Required Course outside of Major Department</b>		
BIOL 210	Medical Microbiology with Lab <sup>2</sup>	3
Subtotal		3
<b>Supporting Coursework:</b>		
Select three courses from the list below:		9
GERO 265	Aging and the Older Person <sup>2</sup>	
GERO 414	Death and Dying <sup>2</sup>	
HCAM 230	US Healthcare Systems <sup>2</sup>	
HLTH 203	Public Health and Physical Activity <sup>2</sup>	
HLTH 211	Women's Health Issues <sup>2</sup>	
HLTH 316	Human Sexuality <sup>2</sup>	
HLTH 408	Public Health Administration	
Subtotal		9
<b>Total Hours</b>		<b>60</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> Course counts for 50% of Major requirements but not for Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## NATURAL SCIENCE AND MATH COLLEGE-WIDE REQUIREMENTS

Code	Title	Hours
BIOL 216	Anatomy and Physiology I with Lab	3
BIOL 217	Anatomy and Physiology II with Lab	3
CHEM 104	Introduction Chemistry I	3
STAT 152	Elementary Statistics I	3

## ADDITIONAL PRE-OT REQUIREMENTS

Code	Title	Hours
EXSC 250	Medical Terminology	3
or HCAM 250	Medical Terminology for Healthcare Administrators	
INDP 318	Research Methods in Interdisciplinary Studies	3
or SOWK 318	Research Methods	
PHYS 201	Elements of Physics I with Lab	3-4
or PE 364	Biomechanics of Individuals with Disabilities	
PSYC 105	Introduction to Psychology	3
PSYC 244	Developmental Psychology	3
PSYC 276	Introduction to Abnormal Psychology	3
<b>Total Hours</b>		<b>18-19</b>

## CO-CURRICULAR AND EXPERIENTIAL LEARNING

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Conference attendance
2. Service-Learning
3. Internships
4. Career Education
5. Peer Education Opportunities

## Doctor of Occupational Therapy (OTD) Prerequisite Admission Requirements

### For Application Requirements

Please refer to Slippery Rock University's Occupational Therapy Studies (Master of Science in Occupational Therapy Studies) website for requirements: <http://www.sru.edu/OT> (<http://www.sru.edu/OT/>)

### Rock Studies 2

Code	Title	Hours
<b>Prerequisite Courses - SRU Occupational Therapy</b>		
BIOL 209		4
BIOL 309		4
EXSC 250	Medical Terminology	3
or HCAM 250	Medical Terminology for Healthcare Administrators	
PHYS 201	Elements of Physics I with Lab	4
or PE 364	Biomechanics of Individuals with Disabilities	

STAT 152	Elementary Statistics I	3
PSYC 105	Introduction to Psychology	3
PSYC 244	Developmental Psychology	3
PSYC 276	Introduction to Abnormal Psychology	3
Research Methods - Select One: <sup>1</sup>		3
EXSC 300	Research Methods in Exercise Science	
HCAM 499	Health Care Theory and Research Capstone Seminar	
INDP 318	Research Methods in Interdisciplinary Studies	
PSYC 231 & PSYC 232	Psychological Science I: Research Methods and Psychological Science II: Statistical Applications	
SOWK 318	Research Methods	
Anthropology or Sociology - Select One: <sup>1</sup>		3
INDP 106	Race and Ethnic Diversity in the USA	
INDP 202	Introduction to Anthropology	
INDP 211	Biological Anthropology	
INDP 309	Health and Society	
INDP 310	Cultural Area Studies	
INDP 321	Minority Groups	
INDP 324	The Family	
INDP 326	Society, Culture and Self	
INDP 339	Gender Roles and Society	
INDP 342	Sociology of Aging	
RCTH 120	Disability, Community Inclusion, and Diversity	
SOWK 105	Human Diversity	
<b>Total Hours</b>		<b>33</b>

<sup>1</sup> Select one course. See *My Rock Audit* for specific courses.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

HEALTH SCIENCE - PUBLIC HEALTH (6266)

PRE OT (SRU Traditional)

Effective Summer 2022

Revised 04.25.2022

UCC 02.15.2022

## RECOMMENDED FOUR-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
HLTH 103	Health and Behavior Change	3

CHEM 104	Introduction Chemistry I	3
ENGL 102	Critical Writing	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ESAP 101	FYRST Seminar *	1
CPSC 100	Introduction to Computing for Liberal Arts <sup>3</sup>	1
Creative & Aesthetic Inquiry (p. 29)		3

**Hours** **17**

**Spring**

ENGL 104	Critical Reading	3
PSYC 105	Introduction to Psychology	3
SCI 102	Understanding the Physical World <sup>4</sup>	3
Humanities Inquiry (p. 29)		3
Social Science Inquiry (p. 29)		3

**Hours** **15**

**Second Year****Fall**

HLTH 210	Introduction to Public Health	3
BIOL 216	Anatomy and Physiology I with Lab	3
INDP 202 or SOWK 105	Introduction to Anthropology or Human Diversity	3
PSYC 244	Developmental Psychology	3
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29) **		3
Declare a Thematic Thread <sup>2</sup>		

**Hours** **18**

**Spring**

HLTH 301	Introduction to Health Education	3
BIOL 217	Anatomy and Physiology II with Lab	3
EXSC 250	Medical Terminology	3
PSYC 276	Introduction to Abnormal Psychology	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	

**Hours** **18**

**Third Year****Fall**

HLTH 312	Data Management for Health Science	3
HLTH 314	Nutrition and Health	3
HLTH 406	Program Planning and Evaluation	3
Public Health Supporting Coursework		3
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29) **		3

**Hours** **18**

**Spring**

HLTH 310	Environmental Health	3
HLTH 311	International Health	3
HLTH 313	Biostatistics	3
HLTH 410	Epidemiology	3

PHYS 201 or PE 364	Elements of Physics I with Lab or Biomechanics of Individuals with Disabilities	3-4
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**Hours** **15-16**

**Summer**

HLTH 450	Internship (unless taken in spring semester of senior year)	0
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**Hours** **0**

**Fourth Year****Fall**

HLTH 309	Introduction to the Study of Disease	3
BIOL 210	Medical Microbiology with Lab	3
INDP 318 or SOWK 318	Research Methods in Interdisciplinary Studies or Research Methods	3
Public Health Supporting Coursework		6

**Hours** **15**

**Winter****Potential On-line Winter Courses**

HLTH 311	International Health	0
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**Hours** **0**

**Spring**

HLTH 440	Public Health Seminar	3
Internship (unless taken prior to senior year)		12

**Hours** **15**

**Summer****Potential On-line Summer Courses**

HLTH 311 or HLTH 211	International Health or Women's Health Issues	0
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**Hours** **0**

**Total Hours\*\*** **131-132**

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Choose a Thematic Thread that contains PSYC 105 & Medical Terminology.

<sup>3</sup> If you enter in Fall 2021 or later & do not pass the Computer Competency Exam.

<sup>4</sup> Only if you choose to NOT take PHYS 201 with lab

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* You will already have if you declare a Thematic Thread Fall 2022 or later that includes PSYC 105 & Medical Terminology.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

# Health Science - Public Health, Bachelor of Science (BS) / Pre- Physical Therapy (SRU) (3+3)

## PUBLIC HEALTH PROGRAM LEARNING OUTCOMES

- **Effective Professional Communication:** Communicate with clients in an individual or group setting and with health professionals in a variety of health settings using a combination of communication skills for a clear exchange of ideas and information, listening and comprehending the viewpoints of others, effectively presenting information in oral and written formats and integrating media/technology.
- **Professional Competency:** Use reasoned judgment drawing upon a broad knowledge base from social, behavioral and natural science, education and health to assess, plan, implement, evaluate and coordinate health promotion for individuals and communities.
- **Professional Ethics:** Apply high ethical standards to public health practice with a sensitivity to multicultural traditions, legal issues, and adherence to a code of ethics of professional health organizations.
- **Continual Professional and Personal Development:** Continue personal and professional development in holistic health, including the components of physical, emotional, spiritual, social, environmental and vocational health, through continuing education, advanced study, and participation in professional health organizations

## What are your options?

**Pre-Physical Therapy SRU 3+3:** Earn a Doctor of Physical Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU DPT program. During your third undergraduate year, you apply for admission into the SRU DPT program. If accepted, your first year in the SRU DPT program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Physical Therapy (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU DPT program and apply to the SRU DPT program in your senior year.

## RELATED LINKS

Public Health - Pre-Physical Therapy, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/public-health-pre-physical-therapy/>)

Public Health Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/public-health/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

**1<sup>st</sup> Major: Public Health**

- Overall GPA: 2.00 or higher
- Major GPA (includes Major Requirements and College Wide Requirements): 2.00 or higher

### 2<sup>nd</sup> Major: Pre-PT SRU 3+3 Public Health

- Overall GPA: 3.00 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	43
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	33
	Natural Science and Math College-Wide Requirements	12
	Electives	11

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the 1<sup>st</sup> year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.

## ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Physical &amp; Natural Sciences Inquiry</i>		
BIOL 216	Anatomy and Physiology I with Lab	3
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
Subtotal		16

### Thematic Thread

Select 12 Credits (p. 29) <sup>2</sup>		12
Required Thematic Thread Coursework:		
PSYC 105	Introduction to Psychology	
EXSC 250	Medical Terminology	

<b>Total Hours</b>	<b>43</b>
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- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.
- <sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## MAJOR REQUIREMENTS

- If you choose to pursue Public Health 3+3 and are not accepted into the DPT program, then additional coursework is required to complete a first major of Public Health. Please refer to Public Health Curriculum Guide.

Code	Title	Hours
<b>Required Courses in Public Health</b>		
HLTH 103	Health and Behavior Change	3
HLTH 210	Introduction to Public Health	3
HLTH 301	Introduction to Health Education	3
HLTH 309	Introduction to the Study of Disease	3
HLTH 310	Environmental Health	3
HLTH 311	International Health	3
HLTH 312	Data Management for Health Science	3
HLTH 313	Biostatistics	3
HLTH 314	Nutrition and Health	3
HLTH 406	Program Planning and Evaluation	3

HLTH 410	Epidemiology	3
Subtotal		33
<b>Total Hours</b>		<b>33</b>

- <sup>1</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## NATURAL SCIENCE AND MATH COLLEGE WIDE REQUIREMENTS

Code	Title	Hours
BIOL 216	Anatomy and Physiology I with Lab <sup>1</sup>	3
BIOL 217	Anatomy and Physiology II with Lab	3
CHEM 107	General Chemistry I <sup>1</sup>	3
CHEM 111	General Chemistry I Lab	1
STAT 152	Elementary Statistics I <sup>1</sup>	3
<b>Total Hours</b>		<b>13</b>

- <sup>1</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

## PHYSICAL THERAPY PREREQUISITE COURSES

Code	Title	Hours
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
PHYS 201	Elements of Physics I with Lab	4
PHYS 202	Elements of Physics II/ Lab	4
PSYC 105	Introduction to Psychology	3
PSYC XXX	Additional Psychology Course	3
<b>Total Hours</b>		<b>18</b>

## 3+3 REQUIREMENTS FOR ALL MAJORS

- A 3.0 or higher GPA is required to remain in the 3+3 program.
- You may not have more than one "W" in a required course.
- You can only be in the 3+3 program for maximum of three (3) years full-time continuous enrollment. If any of these requirements are not met, the 3+3 designation will be removed from your record.
- Should 3+3 Physical Therapy students be unsuccessful in completing the 1st year (either Fall and/or Spring semesters) of the DPT program and want to complete their original undergraduate degree, it is solely up to the discretion of their undergraduate program coordinator to determine which, if any, physical therapy courses will count toward the completion of their undergraduate degree. In addition, students must complete any unfulfilled requirements of his/her undergraduate major.

## CO-CURRICULAR AND EXPERIENTIAL LEARNING

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

- Conference attendance
- Service-Learning
- Internships



4. Career Education
5. Peer Education Opportunities

## Doctor of Physical Therapy (DPT) Prerequisite Admission Requirements – Pre-Physical Therapy SRU 3+3

### For Application Requirements

Please refer to Slippery Rock University's Physical Therapy (Doctor of Physical Therapy) website for requirements: [www.sru.edu/PT](http://www.sru.edu/PT) (<http://www.sru.edu/PT/>).

### Rock Studies 2

Code	Title	Hours
<b>Prerequisite Courses - SRU Physical Therapy</b>		
Select one of the following:		6-8
BIOL 209 & BIOL 309	and	
BIOL 340 & BIOL 410	Vertebrate Anatomy with Lab and Animal Physiology with Lab	
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
Select one of the following:		8
PHYS 201 & PHYS 202	Elements of Physics I with Lab and Elements of Physics II/ Lab	
PHYS 216 & PHYS 217	University Physics 1 with Lab and University Physics 2 with Lab	
STAT 152 or BIOL 325	Elementary Statistics I Biometry with Lab	3
PSYC 105	Introduction to Psychology	3
Additional Psychology Course <sup>1</sup>		3
<b>Total Hours</b>		<b>31-33</b>

<sup>1</sup> See My Rock Audit for specific courses.

### Requirements for Pre-Physical Therapy SRU 3+3

If any of these requirements are not met, the 3+3 designation will be removed from the student's record:

1. A 3.0 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Physical Therapy SRU 3+3 program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

### Provision

Should a Pre-Physical Therapy SRU 3+3 student be unsuccessful in completing the 1st two semesters (fall or spring) of the Doctor of Physical Therapy Program and wants to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, Physical Therapy courses will count toward the completion of his/her undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the Doctor of Physical Therapy Program with an earned Bachelor's degree.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

HEALTH SCIENCE PUBLIC HEALTH - BS (6266)

3+3 PRE PT (62P5)

This program is effective as of Summer 2022

Revised 04.25.2022

UCC 2.15.2022

## RECOMMENDED THREE-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
HLTH 103	Health and Behavior Change	3
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
ENGL 102	Critical Writing	3
ESAP 101	FIRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
ENGL 104	Critical Reading	3
PSYC 105	Introduction to Psychology	3
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>13</b>
<b>Second Year</b>		
<b>Fall</b>		
HLTH 210	Introduction to Public Health	3
BIOL 216	Anatomy and Physiology I with Lab	3
Additional PSYC course		3
Social Science Inquiry (p. 29)		3
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29) **		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>18</b>
<b>Spring</b>		
HLTH 301	Introduction to Health Education	3
HLTH 311	International Health	3
BIOL 217	Anatomy and Physiology II with Lab	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	

PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>18</b>
<b>Third Year</b>		
<b>Fall</b>		
HLTH 309	Introduction to the Study of Disease	3
HLTH 312	Data Management for Health Science	3
HLTH 314	Nutrition and Health	3
HLTH 406	Program Planning and Evaluation	3
PHYS 201	Elements of Physics I with Lab	4
<b>Hours</b>		<b>16</b>
<b>Winter</b>		
<b>Potential On-line Winter Courses</b>		
HLTH 311	International Health	0
<b>Hours</b>		<b>0</b>
<b>Spring</b>		
HLTH 310	Environmental Health	3
HLTH 313	Biostatistics	3
HLTH 410	Epidemiology	3
PHYS 202	Elements of Physics II/ Lab	4
CPSC 100	Introduction to Computing for Liberal Arts	1
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>17</b>
<b>Summer</b>		
<b>Potential On-line Summer Courses</b>		
HLTH 311	International Health	0
<b>Hours</b>		<b>0</b>
<b>Fourth Year</b>		
<b>Fall</b>		
<b>Senior Year – Semester 1</b>		
If not admitted to SRU DPT Program		
Public Health Supporting Coursework - select three		9
BIOL 210	Medical Microbiology with Lab	3
<b>Hours</b>		<b>12</b>
<b>Spring</b>		
<b>Senior Year – Semester 2</b>		
If not admitted to SRU DPT Program		
HLTH 440	Public Health Seminar	3
HLTH 450	Internship (or summer after senior year)	12
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>126</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Choose a Thematic Thread that contains PSYC 105 if you declare a Thread in Fall 2022 or later.

<sup>3</sup> If you enter in Fall 2021 or later & do not pass the Computer Competency Exam.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* You will already have if you declare a Thematic Thread Fall 2022 or later that includes PSYC 105 & Medical Terminology.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6266

Concentration Code: 62P5

Revised 01.18.2023

## Health Science - Public Health, Bachelor of Science (BS) / Pre-Physical Therapy (SRU) (Traditional)

### PUBLIC HEALTH PROGRAM LEARNING OUTCOMES

- **Effective Professional Communication:** Communicate with clients in an individual or group setting and with health professionals in a variety of health settings using a combination of communication skills for a clear exchange of ideas and information, listening and comprehending the viewpoints of others, effectively presenting information in oral and written formats and integrating media/technology.
- **Professional Competency:** Use reasoned judgment drawing upon a broad knowledge base from social, behavioral and natural science, education and health to assess, plan, implement, evaluate and coordinate health promotion for individuals and communities.
- **Professional Ethics:** Apply high ethical standards to public health practice with a sensitivity to multicultural traditions, legal issues, and adherence to a code of ethics of professional health organizations.
- **Continual Professional and Personal Development:** Continue personal and professional development in holistic health, including the components of physical, emotional, spiritual, social, environmental and vocational health, through continuing education, advanced study, and participation in professional health organizations

## What are your options?

**Pre-Physical Therapy SRU 3+3:** Earn a Doctor of Physical Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU DPT program. During your third undergraduate year, you apply for admission into the SRU DPT program. If accepted, your first year in the SRU DPT program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Physical Therapy (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU DPT program and apply to the SRU DPT program in your senior year.

## RELATED LINKS

Public Health - Pre-Physical Therapy, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/public-health-pre-physical-therapy/>)

Public Health Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/public-health/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	43
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	60
	Natural Science and Math College-Wide Requirements	12
	Electives	17

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Physical &amp; Natural Sciences Inquiry</i>		
BIOL 216	Anatomy and Physiology I with Lab	3
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
Subtotal		16
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12

#### Required Thematic Thread Coursework:

EXSC 250	Medical Terminology
PSYC 105	Introduction to Psychology
<b>Total Hours</b>	<b>43</b>

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.
- <sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

### MAJOR REQUIREMENTS

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Courses in Public Health</b>		
HLTH 103	Health and Behavior Change <sup>1</sup>	3
HLTH 210	Introduction to Public Health <sup>1</sup>	3
HLTH 301	Introduction to Health Education <sup>1</sup>	3
HLTH 309	Introduction to the Study of Disease <sup>1</sup>	3
HLTH 310	Environmental Health <sup>1</sup>	3
HLTH 311	International Health <sup>1</sup>	3

HLTH 312	Data Management for Health Science <sup>1</sup>	3
HLTH 313	Biostatistics <sup>1</sup>	3
HLTH 314	Nutrition and Health <sup>1</sup>	3
HLTH 406	Program Planning and Evaluation <sup>1</sup>	3
HLTH 410	Epidemiology <sup>1</sup>	3
HLTH 440	Public Health Seminar <sup>1</sup>	3
Subtotal		36

**Required Internship**

HLTH 450	Internship <sup>1</sup>	12
Subtotal		12

**Required Course outside of Major Department**

BIOL 210	Medical Microbiology with Lab <sup>2</sup>	3
Subtotal		3

**Supporting Coursework:**

Select three courses from the list below: 9

GERO 265	Aging and the Older Person <sup>2</sup>	
GERO 414	Death and Dying <sup>2</sup>	
HCCAM 230	US Healthcare Systems <sup>2</sup>	
HLTH 203	Public Health and Physical Activity <sup>2</sup>	
HLTH 211	Women's Health Issues <sup>2</sup>	
HLTH 316	Human Sexuality <sup>2</sup>	
HLTH 408	Public Health Administration	
Subtotal		9

**Total Hours** 60

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> Course counts for 50% of Major requirements but not for Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**NATURAL SCIENCE AND MATH COLLEGE-WIDE REQUIREMENTS**

Code	Title	Hours
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
STAT 152	Elementary Statistics I	3
BIOL 216	Anatomy and Physiology I with Lab	3
BIOL 217	Anatomy and Physiology II with Lab	3

**ADDITIONAL PHYSICAL THERAPY PREREQUISITE COURSES**

Code	Title	Hours
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
PHYS 201	Elements of Physics I with Lab	4
PHYS 202	Elements of Physics II/ Lab	4
PSYC 105	Introduction to Psychology	3
Additional Psychology Course		3

**CO-CURRICULAR AND EXPERIENTIAL LEARNING**

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student

success and participation in the following types of programs and activities:

1. Conference attendance
2. Service-Learning
3. Internships
4. Career Education
5. Peer Education Opportunities

**Doctor of Physical Therapy (DPT)  
Prerequisite Admission Requirements****For Application Requirements**

Please refer to Slippery Rock University's Physical Therapy (Doctor of Physical Therapy) website for requirements: [www.sru.edu/PT/](http://www.sru.edu/PT/) (<http://www.sru.edu/PT/>)

**Rock Studies 2**

Code	Title	Hours
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**Prerequisite Courses - SRU Physical Therapy**

Select one of the following: 6-8

BIOL 209 and  
& BIOL 309

BIOL 340 Vertebrate Anatomy with Lab  
& BIOL 410 and Animal Physiology with Lab

CHEM 107 General Chemistry I 4  
& CHEM 111 and General Chemistry I Lab

CHEM 108 General Chemistry II 4  
& CHEM 112 and General Chemistry II Lab

Select one of the following: 8

PHYS 201 Elements of Physics I with Lab  
& PHYS 202 and Elements of Physics II/ Lab

PHYS 211 General Physics I with Lab  
& PHYS 213 and General Physics III/ Lab

STAT 152 Elementary Statistics I 3  
or BIOL 325 Biometry with Lab

PSYC 105 Introduction to Psychology 3

Additional Psychology Course <sup>1</sup> 3

**Total Hours** 31-33

<sup>1</sup> See My Rock Audit for specific courses.

**Important Curriculum Guide Notes**

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

HEALTH SCIENCE - PUBLIC HEALTH (6266)

PRE PT (SRU Traditional)

Effective Fall 2016

Revised 07.01.2022

UCC 02.01.2022

## RECOMMENDED FOUR-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
HLTH 103	Health and Behavior Change	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Creative & Aesthetic Inquiry (p. 29)		3
CPSC 100	Introduction to Computing for Liberal Arts ((if you enter Fall 2021 or later and do not pass the Computer Competency exam))	1
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
PSYC 105	Introduction to Psychology	3
Humanities Inquiry (p. 29)		3
Social Science Inquiry (p. 29)		3
Thematic Thread Requirement (p. 29)		3
Declare a Thematic Thread (Choose a Thematic Thread that contains PSYC 105)		
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
HLTH 210	Introduction to Public Health	3
BIOL 216	Anatomy and Physiology I with Lab	3
Additional PSYC Course		3
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
HLTH 301	Introduction to Health Education	3
BIOL 217	Anatomy and Physiology II with Lab	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
HLTH 312	Data Management for Health Science	3
HLTH 314	Nutrition and Health	3
BIOL 210	Medical Microbiology with Lab	3
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
<b>Hours</b>		<b>13</b>
<b>Spring</b>		
HLTH 310	Environmental Health	3
HLTH 311	International Health	3

HLTH 313	Biostatistics	3
HLTH 410	Epidemiology	3
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
<b>Hours</b>		<b>16</b>
<b>Summer</b>		
HLTH 450	Internship	12
<b>Hours</b>		<b>12</b>
<b>Fourth Year</b>		
<b>Fall</b>		
HLTH 309	Introduction to the Study of Disease	3
HLTH 406	Program Planning and Evaluation	3
PHYS 201	Elements of Physics I with Lab	4
Public Health Supporting Coursework		3
<b>Hours</b>		<b>13</b>
<b>Winter</b>		
<b>Potential On-line Winter Courses</b>		
HLTH 311	International Health	0
<b>Hours</b>		<b>0</b>
<b>Spring</b>		
HLTH 440	Public Health Seminar	3
PHYS 202	Elements of Physics II/ Lab	4
Public Health Supporting Coursework		3
Public Health Supporting Coursework		3
<b>Hours</b>		<b>13</b>
<b>Summer</b>		
<b>Potential On-line Summer Courses</b>		
HLTH 311	International Health	0
HLTH 211	Women's Health Issues	0
<b>Hours</b>		<b>0</b>
<b>Total Hours**</b>		<b>126</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 6266

Concentration Code: SRU Traditional

Revised: 01.18.2023



# Health Science - Public Health, Bachelor of Science (BS) / Pre- Physician Assistant (SRU) (3+2)

## PUBLIC HEALTH PROGRAM LEARNING OUTCOMES

- **Effective Professional Communication:** Communicate with clients in an individual or group setting and with health professionals in a variety of health settings using a combination of communication skills for a clear exchange of ideas and information, listening and comprehending the viewpoints of others, effectively presenting information in oral and written formats and integrating media/technology.
- **Professional Competency:** Use reasoned judgment drawing upon a broad knowledge base from social, behavioral and natural science, education and health to assess, plan, implement, evaluate and coordinate health promotion for individuals and communities.
- **Professional Ethics:** Apply high ethical standards to public health practice with a sensitivity to multicultural traditions, legal issues, and adherence to a code of ethics of professional health organizations.
- **Continual Professional and Personal Development:** Continue personal and professional development in holistic health, including the components of physical, emotional, spiritual, social, environmental and vocational health, through continuing education, advanced study, and participation in professional health organizations

## What are your options?

**Pre-Physician Assistant SRU 3+2:** Earn a Master of Science degree in Physician Assistant Studies in five years rather than six. In the first three years, you complete your major courses and pre-requisites for the SRU PA program. At the end of your second year, you apply for admission into the SRU PA program. If accepted, your first year in the SRU PA program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Physician Assistant (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU PA program and apply to the SRU PA program in your senior year.

## RELATED LINKS

Public Health - Pre-Physician Assistant, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/public-health-pre-physician-assistant/>)

Public Health Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/public-health/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

**1<sup>st</sup> Major: Public Health**

- Overall GPA: 2.00 or higher
- Major GPA (only includes Health courses): 2.00 or higher

### 2<sup>nd</sup> Major: Pre-PA SRU 3+2 Public Health

- Overall GPA: 3.00 or higher
- Overall GPA: 3.25 or higher (Fall 2018 and after)

### SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	43
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	36
	Natural Science and Math College-Wide Requirements	12
	Electives	20

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the 1<sup>st</sup> year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.

### ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Physical &amp; Natural Sciences Inquiry</i>		
BIOL 216	Anatomy and Physiology I with Lab	3
CHEM 107	General Chemistry I	4
& CHEM 111	and General Chemistry I Lab	
Subtotal		16
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Required Thematic Thread Coursework:</b>		
EXSC 250	Medical Terminology	
PSYC 105	Introduction to Psychology	
<b>Total Hours</b>		<b>43</b>

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.
- <sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## MAJOR REQUIREMENTS

- If you choose to pursue Pre-Physician Assistant SRU 3+2 Public Health and are not accepted into the PA program, then additional coursework is required to complete a first major of Public Health. Please refer to Public Health Curriculum Guide.

Code	Title	Hours
<b>Required Courses in Public Health</b>		
HLTH 103	Health and Behavior Change	3
HLTH 210	Introduction to Public Health	3
HLTH 301	Introduction to Health Education	3
HLTH 309	Introduction to the Study of Disease	3
HLTH 310	Environmental Health	3
HLTH 311	International Health	3
HLTH 312	Data Management for Health Science	3
HLTH 313	Biostatistics	3
HLTH 314	Nutrition and Health	3
HLTH 406	Program Planning and Evaluation	3

HLTH 410	Epidemiology	3
Subtotal		33
<b>Required Courses from other Departments</b>		
BIOL 210	Medical Microbiology with Lab	3
Subtotal		3
<b>Total Hours</b>		<b>36</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## NATURAL SCIENCE AND MATH COLLEGE-WIDE REQUIREMENTS

Code	Title	Hours
BIOL 216	Anatomy and Physiology I with Lab	3
BIOL 217	Anatomy and Physiology II with Lab	3
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
STAT 152	Elementary Statistics I	3
<b>Total Hours</b>		<b>13</b>

## ADDITIONAL PHYSICIAN ASSISTANT PREREQUISITE COURSES

Code	Title	Hours
BIOL 104		4
BIOL 250	Genetics with Lab	4
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
CHEM 201	Organic Chemistry I	3
EXSC 250 or HCAM 250	Medical Terminology Medical Terminology for Healthcare Administrators	3
PSYC 105	Introduction to Psychology	3
<b>Total Hours</b>		<b>21</b>

## CO-CURRICULAR AND EXPERIENTIAL LEARNING

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Conference attendance
2. Service-Learning
3. Internships
4. Career Education
5. Peer Education Opportunities

## Physician Assistant Studies (Master of Science in Physician Assistant Studies)

### Prerequisite Admission Requirements – Pre- Physician Assistant 3+2

#### For Application Requirements

Please refer to Slippery Rock University's Physician Assistant Studies (Master of Science in Physician Assistant Studies) website for requirements: <http://www.sru.edu/pa> (<http://www.sru.edu/pa/>)

**Rock Studies 2**

Code	Title	Hours
<b>Prerequisite Courses - SRU Physician Assistant</b>		
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 210 or BIOL 330	Medical Microbiology with Lab Microbiology/Lab	3
BIOL 209		4
BIOL 309		4
BIOL 250	Genetics with Lab	4
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
CHEM 201	Organic Chemistry I	3
EXSC 250 or HCAM 250	Medical Terminology Medical Terminology for Healthcare Administrators	3
PSYC 105	Introduction to Psychology	3
Inferential Statistics Course <sup>1</sup>		3
<b>Total Hours</b>		<b>39</b>

<sup>1</sup> Any statistics course with inferential statistics embedded. See My Rock Audit for specific courses.

**Pre-Physician Assistant SRU 3+2 Requirements**

If any of these requirements are not met, the 3+2 designation will be removed from the student's record:

1. A 3.25 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Physician Assistant SRU 3+2 program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

**Provision**

Should a Pre-Physician Assistant SRU 3+2 student be unsuccessful in completing the 1<sup>st</sup> two semesters (summer or fall) of the Physician Assistant Program and wants to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, Physician Assistant courses will count toward the completion of his/her undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the Physician Assistant Studies Program with an earned Bachelor's degree.

**Important Curriculum Guide Notes**

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

HEALTH SCIENCE - PUBLIC HEALTH - BS (6266)

PRE-PA RSU 3+2 (6SPH)

This program is effective as of Summer 2022

Revised 04.25.2022

UCC 2.15.2022

**RECOMMENDED THREE-YEAR PLAN**

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
HLTH 103	Health and Behavior Change	3
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
CPSC 100	Introduction to Computing for Liberal Arts	1
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>18</b>
<b>Spring</b>		
BIOL 210	Medical Microbiology with Lab	3
ENGL 104	Critical Reading	3
PSYC 105	Introduction to Psychology	3
Humanities Inquiry (p. 29)		3
Social Science Inquiry (p. 29)		3
Thematic Thread Requirement (p. 29)		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>18</b>
<b>Second Year</b>		
<b>Fall</b>		
HLTH 210	Introduction to Public Health	3
BIOL 216	Anatomy and Physiology I with Lab	3
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
EXSC 250	Medical Terminology	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Thematic Thread Requirement (p. 29) **		3
**Additional fees will apply if student takes over 18 credits.		
<b>Hours</b>		<b>19</b>
<b>Spring</b>		
HLTH 301	Introduction to Health Education	3
HLTH 311	International Health	3
BIOL 217	Anatomy and Physiology II with Lab	3
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
STAT 152	Elementary Statistics I	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
HLTH 309	Introduction to the Study of Disease	3
HLTH 312	Data Management for Health Science	3
HLTH 314	Nutrition and Health	3

HLTH 406	Program Planning and Evaluation	3
CHEM 201	Organic Chemistry I	3
Thematic Thread Requirement (p. 29) **		3
<b>Hours</b>		<b>18</b>

**Winter****Potential On-line Winter Courses**

HLTH 311	International Health	
<b>Hours</b>		<b>0</b>

**Spring**

HLTH 410	Epidemiology	3
HLTH 313	Biostatistics	3
HLTH 310	Environmental Health	3
BIOL 250	Genetics with Lab	4
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>16</b>

**Summer****Potential On-line Summer Courses**

HLTH 311	International Health	0
EXSC 250	Medical Terminology	0
<b>Hours</b>		<b>0</b>

**Fourth Year****Fall****If not admitted to SRU PA Program**

Public Health Supporting Coursework - select three		9
<b>Hours</b>		<b>9</b>

**Spring****If not admitted to SRU PA Program**

HLTH 440	Public Health Seminar	3
HLTH 450	Internship (or summer after senior year)	12
<b>Hours</b>		<b>15</b>

**Total Hours\*\*** **129**

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Choose a Thematic Thread that contains PSYC 105 & Medical Terminology if you declare a Thread in Fall 2022 or later.

<sup>3</sup> If you enter in Fall 2021 or later and do not pass the Computer Competency exam.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* You will already have if you declare a Thematic Thread Fall 2022 or later that includes PSYC 105 and Medical Technology.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6266

Concentration: 6SPH

Revised: 01.18.2023

## Health Science - Public Health, Bachelor of Science (BS) / Pre-Physician Assistant (SRU) (Traditional)

### PUBLIC HEALTH PROGRAM LEARNING OUTCOMES

- **Effective Professional Communication:** Communicate with clients in an individual or group setting and with health professionals in a variety of health settings using a combination of communication skills for a clear exchange of ideas and information, listening and comprehending the viewpoints of others, effectively presenting information in oral and written formats and integrating media/technology.
- **Professional Competency:** Use reasoned judgment drawing upon a broad knowledge base from social, behavioral and natural science, education and health to assess, plan, implement, evaluate and coordinate health promotion for individuals and communities.
- **Professional Ethics:** Apply high ethical standards to public health practice with a sensitivity to multicultural traditions, legal issues, and adherence to a code of ethics of professional health organizations.
- **Continual Professional and Personal Development:** Continue personal and professional development in holistic health, including the components of physical, emotional, spiritual, social, environmental and vocational health, through continuing education, advanced study, and participation in professional health organizations

### What are your options?

**Pre-Physician Assistant SRU 3+2:** Earn a Master of Science degree in Physician Assistant Studies in five years rather than six. In the first three years, you complete your major courses and pre-requisites for the SRU PA program. At the end of your second year, you apply for admission into the SRU PA program. If accepted, your first year in the SRU PA program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Physician Assistant (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU PA program and apply to the SRU PA program in your senior year.

### RELATED LINKS

Public Health - Pre-Physician Assistant, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/public-health-pre-physician-assistant/>)

Public Health Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/public-health/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

CURRICULUM GUIDE
GPA REQUIREMENT

Overall GPA: 2.0 or higher	Major GPA: 2.0 or higher
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SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	43
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	60
	Natural Science and Math College-Wide Requirements	12
	Electives	17

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Physical &amp; Natural Sciences Inquiry</i>		
BIOL 216	Anatomy and Physiology I with Lab	3
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
Subtotal		16
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
Required Thematic Thread Coursework:		
EXSC 250	Medical Terminology	
PSYC 105	Introduction to Psychology	
<b>Total Hours</b>		<b>43</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

MAJOR REQUIREMENTS

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above
- Students may choose to earn a BS in Health Science – Public Health as preparation for graduate studies in many health care related fields. In this case, the student should learn what prerequisites are required for his/her intended graduate program and take those courses as electives while completing the Public Health program.

Code	Title	Hours
<b>Required Courses in Public Health</b>		
HLTH 103	Health and Behavior Change	3
HLTH 210	Introduction to Public Health	3
HLTH 301	Introduction to Health Education	3
HLTH 309	Introduction to the Study of Disease	3
HLTH 310	Environmental Health	3
HLTH 311	International Health	3
HLTH 312	Data Management for Health Science	3
HLTH 313	Biostatistics	3



HLTH 314	Nutrition and Health	3
HLTH 406	Program Planning and Evaluation	3
HLTH 410	Epidemiology	3
HLTH 440	Public Health Seminar	3
Subtotal		36

**Required Internship**

HLTH 450	Internship	12
Subtotal		12

**Required Course outside of Major Department**

BIOL 210	Medical Microbiology with Lab	3
Subtotal		3

**Required Coursework:**

Select three courses from the list below: 9

HLTH 203	Public Health and Physical Activity	
HLTH 211	Women's Health Issues	
HLTH 316	Human Sexuality	
HLTH 408	Public Health Administration	
GERO 265	Aging and the Older Person	
GERO 414	Death and Dying	
HCCAM 230	US Healthcare Systems	
Subtotal		9

**Total Hours** 60

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**NATURAL SCIENCE AND MATH COLLEGE-WIDE REQUIREMENTS**

Code	Title	Hours
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
STAT 152	Elementary Statistics I	3
BIOL 216	Anatomy and Physiology I with Lab	3
BIOL 217	Anatomy and Physiology II with Lab	3

**ADDITIONAL PHYSICIAN ASSISTANT PREREQUISITE COURSES**

Code	Title	Hours
BIOL 104		
BIOL 250	Genetics with Lab	4
CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
CHEM 201	Organic Chemistry I	3
EXSC 250	Medical Terminology	3
or HCCAM 250	Medical Terminology for Healthcare Administrators	
PSYC 105	Introduction to Psychology	3

**CO-CURRICULAR AND EXPERIENTIAL LEARNING**

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Conference attendance
2. Service-Learning
3. Internships
4. Career Education
5. Peer Education Opportunities

**Physician Assistant Studies (Master of Science in Physician Assistant Studies)****Prerequisite Admission Requirements****For Application Requirements**

Please refer to Slippery Rock University's Physician Assistant Studies (Master of Science in Physician Assistant Studies) website for requirements: <http://www.sru.edu/pa> (<http://www.sru.edu/pa/>).

**Rock Studies 2**

Code	Title	Hours
<b>Prerequisite Courses - SRU Physician Assistant</b>		
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
BIOL 209		4
BIOL 309		4
BIOL 250	Genetics with Lab	4
BIOL 210	Medical Microbiology with Lab	3
or BIOL 330	Microbiology/Lab	
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
CHEM 201	Organic Chemistry I	3
EXSC 250	Medical Terminology	3
or HCCAM 250	Medical Terminology for Healthcare Administrators	
PSYC 105	Introduction to Psychology	3
Inferential Statistics Course <sup>1</sup>		3
<b>Total Hours</b>		<b>39</b>

<sup>1</sup> Any statistics course with inferential statistics embedded. See My Rock Audit for specific courses.

**Important Curriculum Guide Notes**

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

HEALTH SCIENCE - PUBLIC HEALTH (6266)

PRE-PA (SRU Traditional)

Effective Fall 2016

Revised 02.10.2022

UCC 02.01.2022

## RECOMMENDED FOUR-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
HLTH 103	Health and Behavior Change	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>13</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
PSYC 105	Introduction to Psychology	3
Humanities Inquiry (p. 29)		3
Social Science Inquiry (p. 29)		3
CPSC 100	Introduction to Computing for Liberal Arts <sup>4</sup>	1
<b>Hours</b>		<b>13</b>
<b>Second Year</b>		
<b>Fall</b>		
HLTH 210	Introduction to Public Health	3
BIOL 216	Anatomy and Physiology I with Lab	3
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29) **		3
Declare a Thematic Thread <sup>3</sup>		
<b>Hours</b>		<b>12</b>
<b>Spring</b>		
HLTH 301	Introduction to Health Education	3
BIOL 217	Anatomy and Physiology II with Lab	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
BIOL 210	Medical Microbiology with Lab	3
HLTH 312	Data Management for Health Science	3
HLTH 314	Nutrition and Health	3
HLTH 406	Program Planning and Evaluation	3
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
HLTH 310	Environmental Health	3
HLTH 311	International Health	3
HLTH 313	Biostatistics	3
HLTH 410	Epidemiology	3
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
<b>Hours</b>		<b>16</b>

<b>Summer</b>		
HLTH 450	Internship	12
<b>Hours</b>		<b>12</b>
<b>Fourth Year</b>		
<b>Fall</b>		
HLTH 309	Introduction to the Study of Disease	3
BIOL 114	Biology II: Foundations of Molecules, Genes and Cells with Lab	4
CHEM 201	Organic Chemistry I	3
Public Health Supporting Coursework		6
<b>Hours</b>		<b>16</b>
<b>Winter</b>		
<b>Potential On-line Winter Courses</b>		
HLTH 311	International Health	0
Rock Studies 2 Requirement OR EXSC 250 (p. 29)		0
<b>Hours</b>		<b>0</b>
<b>Spring</b>		
HLTH 440	Public Health Seminar	3
BIOL 250	Genetics with Lab	4
EXSC 250	Medical Terminology	3
Public Health Supporting Coursework		3
Thematic Thread Requirement (p. 29) **		3
<b>Hours</b>		<b>16</b>
<b>Summer</b>		
<b>Potential On-line Summer Courses</b>		
HLTH 211	Women's Health Issues	0
HLTH 311	International Health	0
EXSC 250	Medical Terminology	0
<b>Hours</b>		<b>0</b>
<b>Total Hours**</b>		<b>129</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> or PA 500 (Graduate courses taken as an undergraduate student count toward their graduate degree, not their undergraduate degree)

<sup>3</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>4</sup> CPSC If you enter in Fall 2021 or later and do not pass the Computer Competency exam.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* You will already have if you declare a Thematic Thread Fall 2022 or later that includes PSYC 105 & Medical Terminology.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6266

Concentration Code: SRU Traditional

Revised: 01.18.2023

## Public Health, Minor

Students in related disciplines find that a minor in Public Health opens additional opportunities in non-profit community agencies, departments of health, work-site health promotion, health care settings and health volunteers such as the American Cancer Society and American Heart Association.

To access Minor Requirements, please view the Curriculum Guide tab.

## RELATED LINKS

Public Health, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/public-health/>)

Public Health Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/public-health/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Minor GPA: 2.0 or higher

### MINOR REQUIREMENTS

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits

Code	Title	Hours
<b>Required Courses</b>		
HLTH 103	Health and Behavior Change	3
HLTH 210	Introduction to Public Health	3
<b>Electives</b>		
Select four of the following:		12
HLTH 301	Introduction to Health Education	
HLTH 309	Introduction to the Study of Disease	
HLTH 310	Environmental Health	
HLTH 311	International Health	
HLTH 312	Data Management for Health Science	
HLTH 313	Biostatistics	
HLTH 314	Nutrition and Health	
HLTH 406	Program Planning and Evaluation	
HLTH 410	Epidemiology	
HLTH 440	Public Health Seminar	
<b>Total Hours</b>		<b>18</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum

categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN PUBLIC HEALTH (40A)

This program is effective as of Fall 2010.

Revised 8-2019

## Recreational Therapy

Chair	Secretary	Location	Department Phone
Dr. Betsy Kemeny	Sheila Honsaker	102 Patterson Hall	724-738-4306

Department Web Site URL (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/recreational-therapy/>)

Department Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/rt-fs.pdf>)

## Faculty

### Whitney Angelini

Instructor

Recreational Therapy

D.P.T., Slippery Rock University

B.S., Slippery Rock University

### Colleen Cooke

Professor

Recreational Therapy

Ed.D., Nova Southeastern University

M.Ed., University of Pittsburgh

B.S., Slippery Rock University

### Heather Gleghorn

Assistant Professor

Recreational Therapy

M.S., East Carolina University

B.S., Slippery Rock University

### Martha Kemeny

Associate Professor

Recreational Therapy

Ph.D., Indiana University of Pennsylvania

M.S., University of North Carolina at Chapel Hill

B.A., Wake Forest University

## PROGRAMS

### MAJORS

- Recreational Therapy, Bachelor of Science (BS) (p. 747)
- Recreational Therapy, Bachelor of Science (BS) / Pre-Occupational Therapy (SRU) (3+3) (p. 750)
- Recreational Therapy, Bachelor of Science (BS) / Pre-Occupational Therapy (SRU) (Traditional) (p. 754)
- Recreational Therapy, Bachelor of Science (BS) / Pre-Physical Therapy (SRU) (3+3) (p. 757)

- Recreational Therapy, Bachelor of Science (BS) / Pre-Physical Therapy (SRU) (Traditional) (p. 761)

## MINORS

- Animal Assisted Interventions, Minor (p. 747)
- Recreational Therapy, Minor (p. 763)

## Courses

### RCTH Courses

#### RCTH 120 - Disability, Community Inclusion, and Diversity

This course is designed to introduce the student to inclusive leisure services. The course reviews attitudes regarding people with disabilities, barriers to inclusion, enabling terminology, and legislative initiatives, which promote inclusion. The ADA will be highlighted along with information on various disabling conditions. The goal of this course is to facilitate an increased awareness of people with disabilities and considerations for providing inclusive services.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course

#### RCTH 139 - Foundations of Academic Discovery

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

#### RCTH 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

#### RCTH 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

#### RCTH 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

#### RCTH 220 - Recreational Therapy Services

Introduces students to the general field of recreational therapy and provides an introduction to various disabilities and how the RT process applies.

Prerequisites: PREE 120<sup>D</sup> or RCTH 120<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

#### RCTH 232 - Recreational Therapy for People with Physical Disabilities

This course will provide information on various physical disabilities and the potential application of Recreational Therapy services with individuals with physical disabilities. The incidence, prevalence, etiology and treatment for each disability will be presented along with implications for RT practice.

Prerequisites: PREE 120<sup>D</sup> or RCTH 120<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

#### RCTH 233 - Recreational Therapy for People with Psychosocial and Mental Disorders

This course will provide information on various mental health impairments and addictive and social disorders. The incidence, prevalence, etiology and treatment for each condition will be presented along with implications for Recreational Therapy practice.

Prerequisites: PREE 120<sup>D</sup> or RCTH 120<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

#### RCTH 252 - Equine Assisted Activities and Therapies

An introduction to equine assisted activities including basic safety skills, lesson preparation, benefits for individuals with disabilities, tack/equine selection, and certification procedures. Students will gain practical experience through riding horses and assisting individuals with disabilities during lessons.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

#### RCTH 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

#### RCTH 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

#### RCTH 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**RCTH 305 - Animal-Assisted Therapy for Diverse Populations & Settings**

This course is designed to provide students with an overview of the various populations that can potentially benefit from Animal-Assisted Interventions (AAI) and Animal-Assisted Therapy (AAT). The focus will be on how these potential benefits of AAT can be incorporated into various settings of service. Students will learn the different approaches to using animals as a partner in facilitating therapeutic outcomes. Students will be exposed to research evidence that supports AAT with populations generally served by health and human services areas. The design of program/treatment plans to facilitate outcomes will be incorporated into the course as well as practical application of AAT.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Animal-Assisted Interventions.

**RCTH 314 - Clinical Aspects of Recreational Therapy**

This course provides a more in-depth look at Recreational Therapy including professional standards of practice, health care accreditation, documentation methods and application of activity analysis in treatment planning. Lab experiences are incorporated into the course.

Prerequisites: PREE 220<sup>D</sup> or RCTH 220<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RCTH 317 - Organization and Management of Recreational Therapy Practice**

This course is designed to provide recreational therapy (RT) majors with the knowledge and skills required to effectively supervise and manage resources within various health and human service settings. Emphasis is placed on accreditation standards, legislative and regulatory requirements, public relations and marketing, strategic planning and decision making, quality improvement and risk management practices, fiscal planning and budgeting and human resource management.

Prerequisites: PREE 220<sup>C</sup> or RCTH 220<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Therapeutic Recreation Serv, Recreational Therapy or Therapeutic Recreation.

**RCTH 319 - Client Assessment in Recreational Therapy**

This course designed to facilitate the development of student knowledge and skills related to the RT assessment process. The course will expose students to information and activities to enhance understanding of the importance of assessment, the various domains of assessment and the various techniques used in the assessment process. Skills will be developed in the areas of selecting and designing assessments, interviewing clients, observing behaviors and documenting assessment results.

Prerequisites: (PREE 220<sup>D</sup> or RCTH 220<sup>D</sup>) and (PREE 229<sup>D</sup> or PREE 314<sup>D</sup> or RCTH 314<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RCTH 320 - Recreational Therapy Program Design**

This course focuses on techniques of recreational therapy program planning including assessment, treatment planning, implementation and evaluation. Students will implement interventions using various leadership strategies to meet the needs of persons with disabilities and disorders and the document results. A lab experience is included in this course.

Prerequisites: (PREE 220<sup>D</sup> or RCTH 220<sup>D</sup>) and (PREE 229<sup>D</sup> or PREE 314<sup>D</sup> or RCTH 314<sup>D</sup>) and (PREE 319<sup>D</sup> or RCTH 319<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RCTH 351 - Recreational Therapy Practicum**

Observation and participation in an agency or program serving individuals with disabling conditions. Cross listed as RCTH352.

Credits: 3

Term(s) Typically Offered: Offered Summer & Winter Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RCTH 352 - Practicum in Therapeutic Recreation**

Observation and participation in an agency or program serving individuals with disabling condition. Cross listed as RCTH351.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**RCTH 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**RCTH 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RCTH 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RCTH 415 - Challenges and Trends in Recreational Therapy**

An integrative course for detailed study of current issues in health care and human services with emphasis on unique and imaginative solutions to the challenges facing the recreational therapy profession. Must be a senior to enroll.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

**RCTH 420 - Recreational Therapy for Older Adults**

An overview of the aging process as it relates to recreational therapy service provision and leisure participation. Focus is on the developmental issues, including psychosocial, biological and economic issues in later life. The course reviews the various settings of service and care continuums available to serve the older adult populations. Legislative and regulatory influences regarding the provision of services to older adults will be discussed.

Prerequisites: (PREE 220<sup>D</sup> or RCTH 220<sup>D</sup>) and (PREE 120<sup>D</sup> or RCTH 120<sup>D</sup>)  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RCTH 422 - Recreational Therapy Interventions I**

An investigation of the historical, philosophical, psychological and educational foundations of leisure education and stress management at RT treatment modalities. The functions of leisure education, including a variety of instruments and techniques appropriate for a variety of publics, are examined. The functions of stress management treatments, as well as a variety of techniques appropriate for a variety of publics, is also examined.

Prerequisites: (PREE 220<sup>D</sup> or RCTH 220<sup>D</sup>) and (PREE 229<sup>D</sup> or PREE 314<sup>D</sup> or RCTH 314<sup>D</sup>) and (PREE 319<sup>D</sup> or RCTH 319<sup>D</sup>) and (PREE 320<sup>D</sup> or RCTH 320<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RCTH 423 - Recreational Therapy Interventions II**

This course will offer an overview of several different Recreational Therapy interventions and techniques, with emphasis on evidence-based practice specific to the areas of community reintegration and its many components, including areas such as social skills, mobility training, and money management (as examples).

Prerequisites: (PREE 220<sup>D</sup> or RCTH 220<sup>D</sup>) and (PREE 229<sup>D</sup> or PREE 314<sup>D</sup> or RCTH 314<sup>D</sup>) and (PREE 232<sup>D</sup> or RCTH 232<sup>D</sup>) and (PREE 233<sup>D</sup> or RCTH 233<sup>D</sup>) and (PREE 319<sup>D</sup> or RCTH 319<sup>D</sup>) and (PREE 320<sup>D</sup> or RCTH 320<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RCTH 450 - Internship**

A supervised off-campus work experience in an appropriate aspect of recreational therapy work. Open only to RCTH majors with advanced standing.

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RCTH 490 - Independent Study**

A special study opportunity for students to investigate in-depth, approved topics in recreation or environmental studies. Topic and credit established by student and supervising instructor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RCTH 491 - Professional Seminar**

This course is designed to assist students in preparing for entry into the environmental education profession. Topics will include career planning, employment opportunities, employment seeking skills, and discussions centering on areas of interest to the student.

Credits: 1

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RCTH 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RCTH 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Animal Assisted Interventions, Minor

Animals play an important role in promoting human health and well-being. The human-animal bond (HAB) is known to promote a variety of physiological, emotional and social benefits. In addition, intervention utilizing animals have produced recognized benefits for individuals with a variety of disabling conditions. The minor in Animal-Assisted Interventions uses an interdisciplinary approach for students to develop the competencies for using Animal-Assisted Interventions in their professional practice. This minor would be especially appropriate for students enrolled in a health-related, human service, or educational major.

To access Minor Requirements, please view the Curriculum Guide tab.

## RELATED LINKS

Animal Assisted Interventions, Minor Program Page ([https://www.sru.edu/academics/majors-and-minors/animal-assisted-interventions-\(minor\)/](https://www.sru.edu/academics/majors-and-minors/animal-assisted-interventions-(minor)/))

Recreational Therapy Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/recreational-therapy/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Minor GPA: 2.00 or higher

### MINOR REQUIREMENTS

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Core Courses</b>		
RCTH 252 or PE 250	Equine Assisted Activities and Therapies Equine Assisted Activities	3
RCTH 305	Animal-Assisted Therapy for Diverse Populations & Settings	3
SOWK 300	Crisis Intervention	3
SOWK 310	Animal Assisted Interventions	3
<b>Professional Electives</b>		
Select two of the following:		6
RCTH 120	Disability, Community Inclusion, and Diversity	

RCTH 232	Recreational Therapy for People with Physical Disabilities	
RCTH 233	Recreational Therapy for People with Psychosocial and Mental Disorders	
RCTH 420	Recreational Therapy for Older Adults	
EXSC 230	Stress Management	
GERO 414	Death and Dying	
INDP 103	Contemporary Social Problems	
INDP 326	Society, Culture and Self	
PCRM 342	Group Facilitation and Leadership	
PE 335	Science of the Mind-Body Connection	
PSYC 244	Developmental Psychology	
PSYC 276	Introduction to Abnormal Psychology	
SOWK 328	Human Behavior and the Social Environment	
Total Hours		18

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Minor in Animal-Assisted Interventions (71C)

This program is effective as of Summer 2022

Revised 06.10.2022

UCC: 03.01.2022

## Recreational Therapy, Bachelor of Science (BS)

### PROGRAM LEARNING OUTCOMES

- **Degree Program Writing Competency:** Upon completion of the degree program RT students will write professionally and effectively, according to expectations of the Recreational Therapy profession.
- **Life-Long Learning:** Recognize the importance of lifelong learning and demonstrates responsibly for self-assessment and growth. This ability is evident through the demonstration of self initiating behaviors, anticipating and responding to changes in a productive manner, assuming responsibility for continuous self reflection assessment of strengths and limitations and in seeking out information from a variety of resources in an independent manner.
- **Methodological Proficiency:** Upon completion of the degree program RT students will use an analytical framework to facilitate the Recreational Therapy process to meet the needs of individuals. The abilities developed include a solid knowledge of the RT process,

assessment methods, planning skills, intervention, techniques and strategies, and evaluation skills.

- **Professional Decision Making:** Analyze and synthesize complex information to make sound clinical decisions. This ability is inclusive of areas such as problem solving, critical thinking, evaluation and organization with application to clinical and non clinical areas.
- **Professional Interactions:** Effectively communicates with people in a variety of professional contexts including assisting clients in confronting and coping with life challenges, collaborating on teams and presenting information in oral and written formats. The abilities developed include striving to maintain objectivity, tolerating ambiguity, appreciating diversity and adhering to conventional standards of expression.
- **Valuing Ethical Responsibilities:** Act with professional values in all situations. These skills include maintaining appropriate humane and ethical treatment of individuals as well as upholding the professional code of ethics. This expertise includes formulating value judgments reflecting a respect for dignity and individuality of every person.

## RELATED LINKS

Recreational Therapy, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/recreational-therapy/>)

Recreational Therapy Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/recreational-therapy/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Major GPA: 2.0 or higher  
Overall GPA: 2.0 or higher

### SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	60
	Professional Electives	12
	NCTRC Certification Requirements	18
	Electives	18

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
	<b>The Rock</b>	
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
	Select one of the following:	3
COMM 200	Civil Discourse: Theory & Practice	

PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
	<b>Subtotal</b>	<b>15</b>
	<b>Integrated Inquiry</b>	
	<i>Creative and Aesthetic Inquiry</i>	
	Select 3 Credits (p. 29)	3
	<i>Humanities Inquiry</i>	
	Select 3 Credits (p. 29)	3
	<i>Social Science Inquiry</i>	
	Select 3 Credits (p. 29)	3
	<i>Natural Sciences Inquiry</i>	
SCI 101	Science of Life	3
	<i>Physical Sciences Inquiry</i>	
SCI 102	Understanding the Physical World	3
	<b>Subtotal</b>	<b>15</b>
	<b>Thematic Thread</b>	
	Required Thematic Thread Coursework: <sup>2</sup>	
PHIL 325	Medical/Health Care Ethics	3
PSYC 105	Introduction to Psychology	3
	Additional 300-400 Level Course	3
	Additional 100-200 Level Course	3
	<b>Total Hours</b>	<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
	Complete one of the following:	0-3
	Meet required minimum SAT or ACT math score OR	
ESAP 110	Beginning Algebra	
	<b>Total Hours</b>	<b>0-3</b>

### Computer Competency

Code	Title	Hours
	Demonstrate "computer competency" by one of the following:	0-3
	Pass Computer Competency Exam OR	
	Select one of the following at SRU or another post-secondary institution:	
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	

PE 202

Technology for Wellness

**Total Hours****0-3****DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT**

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

**MAJOR REQUIREMENTS**

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above
- Students must become certified in First Aid and CPR. This can be accomplished by taking a course (example: American Heart Association or by completing SAFE 205–First Aid & Safety).

Code	Title	Hours
<b>Recreational Therapy Courses</b>		
Must earn a "C" or better in all of the following RCTH courses:		
RCTH 120	Disability, Community Inclusion, and Diversity <sup>1</sup>	3
RCTH 220	Recreational Therapy Services <sup>1</sup>	3
RCTH 232	Recreational Therapy for People with Physical Disabilities <sup>1</sup>	3
RCTH 233	Recreational Therapy for People with Psychosocial and Mental Disorders <sup>1</sup>	3
RCTH 314	Clinical Aspects of Recreational Therapy <sup>1</sup>	3
RCTH 317	Organization and Management of Recreational Therapy Practice <sup>1</sup>	3
RCTH 319	Client Assessment in Recreational Therapy <sup>1</sup>	3
RCTH 320	Recreational Therapy Program Design <sup>1</sup>	3
RCTH 351	Recreational Therapy Practicum <sup>1</sup>	3
RCTH 415	Challenges and Trends in Recreational Therapy <sup>1</sup>	3
RCTH 420	Recreational Therapy for Older Adults <sup>1</sup>	3
RCTH 422	Recreational Therapy Interventions I <sup>1</sup>	3
RCTH 423	Recreational Therapy Interventions II <sup>1</sup>	3
RCTH 450	Internship <sup>1, 2</sup>	12
Subtotal		51
<b>Required Recreational Therapy Courses from Other Departments</b>		
PE 360	Anatomical and Physiological Basis of Physical Activity/Lab <sup>1</sup>	3
PE 364	Biomechanics of Individuals with Disabilities <sup>1</sup>	3
PSYC 244	Developmental Psychology <sup>1, 3</sup>	3
Subtotal		9
<b>Total Hours</b>		<b>60</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> Evidence of current First Aid & CPR certification must be provided prior to enrollment

<sup>3</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**PROFESSIONAL ELECTIVES**

Code	Title	Hours
PHIL 325	Medical/Health Care Ethics <sup>1</sup>	3
PSYC 276	Introduction to Abnormal Psychology	3
Approved Professional Elective		3
<b>Total Hours</b>		<b>9</b>

<sup>1</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total

**NCTRC CERTIFICATION REQUIREMENTS**

These courses must be completed by the student in order to be eligible to take NCTRC Certification Exam

Code	Title	Hours
PE 360	Anatomical and Physiological Basis of Physical Activity/Lab	3
PE 364	Biomechanics of Individuals with Disabilities	3
PHIL 325	Medical/Health Care Ethics <sup>1</sup>	3
PSYC 105	Introduction to Psychology <sup>1</sup>	3
PSYC 244	Developmental Psychology <sup>1</sup>	3
PSYC 276	Introduction to Abnormal Psychology	3
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total

**CO-CURRICULAR AND EXPERIMENTAL LEARNING**

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes
2. Student-faculty research
3. Student leadership development
4. Service-learning classes
5. Internships
6. Volunteering

**Important Curriculum Guide Notes**

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

RECREATIONAL THERAPY - BS (6393)

This program is effective as of Summer 2022  
 Revised 04.21.2022  
 UCC 02.15.2022

## RECOMMENDED FOUR-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
RCTH 120	Disability, Community Inclusion, and Diversity	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
PSYC 105	Introduction to Psychology	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>13</b>
<b>Spring</b>		
RCTH 220	Recreational Therapy Services	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
PSYC 244	Developmental Psychology	3
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
RCTH 233 or RCTH 232	Recreational Therapy for People with Psychosocial and Mental Disorders or Recreational Therapy for People with Physical Disabilities	3
PSYC 276	Introduction to Abnormal Psychology	3
SCI 101	Science of Life	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Declare a Thematic Thread <sup>2</sup>		
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
RCTH 232	Recreational Therapy for People with Physical Disabilities	3
SCI 102	Understanding the Physical World	3
Thematic Thread Requirement (p. 29)		3
Elective/Minor		3
<b>Hours</b>		<b>12</b>
<b>Third Year</b>		
<b>Fall</b>		
RCTH 319	Client Assessment in Recreational Therapy	3
RCTH 351	Recreational Therapy Practicum	3
PE 360	Anatomical and Physiological Basis of Physical Activity/Lab	3
Elective/Minor		3
Thematic Thread Requirement (p. 29)		3

Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>18</b>
<b>Spring</b>		
RCTH 314	Clinical Aspects of Recreational Therapy	3
RCTH 317	Organization and Management of Recreational Therapy Practice	3
RCTH 415	Challenges and Trends in Recreational Therapy	3
RCTH 423	Recreational Therapy Interventions II	3
Thematic Thread Requirement OR Elective (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
RCTH 320	Recreational Therapy Program Design	3
RCTH 420	Recreational Therapy for Older Adults	3
RCTH 422	Recreational Therapy Interventions I	3
PE 364	Biomechanics of Individuals with Disabilities	3
Elective/Minor		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
RCTH 450	Internship	12
PHIL 325	Medical/Health Care Ethics	3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>118</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6393

Revised: 12.10.2020

## Recreational Therapy, Bachelor of Science (BS) / Pre-Occupational Therapy (SRU) (3+3)

### RECREATIONAL THERAPY PROGRAM LEARNING OUTCOMES

- **Degree Program Writing Competency:** Upon completion of the degree program RT students will write professionally and effectively, according to expectations of the Recreational Therapy profession. 1) UG 1 - Act as an effective communicator
- **Life-Long Learning:** Recognize the importance of lifelong learning and demonstrates responsibly for self-assessment and growth. This ability is evident through the demonstration of self initiating behaviors, anticipating and responding to changes in a productive



manner, assuming responsibility for continuous self reflection assessment of strengths and limitations and in seeking out information from a variety of resources in an independent manner. 1) UG 5 - Develop as a whole person

- **Methodological Proficiency:** Upon completion of the degree program RT students will use an analytical framework to facilitate the Recreational Therapy process to meet the needs of individuals. The abilities developed include a solid knowledge of the RT process, assessment methods, planning skills, intervention, techniques and strategies, and evaluation skills. 1) UG 3- Develop scientific literacy, 2) UG 4 Apply quantitative reasoning in appropriate contexts
- **Professional Decision Making:** Analyze and synthesize complex information to make sound clinical decisions. This ability is inclusive of areas such as problem solving, critical thinking, evaluation and organization with application to clinical and non clinical areas. 1) UG 2 Apply critical thinking to argument and problem-solving.
- **Professional Interactions:** Effectively communicates with people in a variety of professional contexts including assisting clients in confronting and coping with life challenges, collaborating on teams and presenting information in oral and written formats. The abilities developed include striving to maintain objectivity, tolerating ambiguity, appreciating diversity and adhering to conventional standards of expression. 1) UG 5 Develop as a whole person, 2) UG 7 Become civically engaged
- **Valuing Ethical Responsibilities:** Act with professional values in all situations. These skills include maintaining appropriate humane and ethical treatment of individuals as well as upholding the professional code of ethics. This expertise includes formulating value judgments reflecting a respect for dignity and individuality of every person. 1) UG 8 Act Ethically

## What are your options?

**Pre-Occupational Therapy SRU 3+3:** Earn a Doctor of Occupational Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU OTD program. At the end of your second year, you apply for admission into the SRU OTD program. If accepted, your first year in the SRU OTD program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Occupational Therapy (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU OTD program and apply to the SRU OTD program in your senior year.

## RELATED LINKS

Recreational Therapy - Pre-Occupational Therapy, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/recreational-therapy-pre-occupational-therapy/>)

Recreational Therapy Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/recreational-therapy/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

#### 1<sup>st</sup> Major: Recreational Therapy

- Overall GPA: 2.0 or higher
- Major GPA (Includes Major Requirements): 2.0 or higher

#### 2<sup>nd</sup> Major: Pre-OT SRU 3+3 Recreational Therapy

- Overall GPA: 3.00 or higher

### SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	44
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	51
	NCTRC Certification Requirements	18
	Electives	27

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the 1<sup>st</sup> year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.

### ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

#### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural and Physical Sciences Inquiry</i>		
BIOL 209		4
BIOL 309		4
Subtotal		17

#### Thematic Thread

Required Thematic Thread Coursework:

EXSC 250	Medical Terminology	3
PHIL 325	Medical/Health Care Ethics	3
PSYC 105	Introduction to Psychology	3

Additional 300-400 Level Course	3
<b>Total Hours</b>	<b>44</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## MAJOR REQUIREMENTS

- If you choose to pursue the Pre-OT SRU 3+3 RT program and not accepted into the OTD program, then you are required to complete RCTH 415, RCTH 423, PE 360 and additional approved RT electives. (See RT BS degree curriculum guide).

Code	Title	Hours
<b>Recreational Therapy Courses</b>		
Must earn a "C" or better in all of the following RCTH courses:		
RCTH 120	Disability, Community Inclusion, and Diversity <sup>1</sup>	3
RCTH 220	Recreational Therapy Services <sup>1</sup>	3
RCTH 232	Recreational Therapy for People with Physical Disabilities <sup>1</sup>	3
RCTH 233	Recreational Therapy for People with Psychosocial and Mental Disorders <sup>1</sup>	3
RCTH 314	Clinical Aspects of Recreational Therapy <sup>1</sup>	3
RCTH 317	Organization and Management of Recreational Therapy Practice <sup>1</sup>	3
RCTH 319	Client Assessment in Recreational Therapy <sup>1</sup>	3

RCTH 320	Recreational Therapy Program Design <sup>1</sup>	3
RCTH 351	Recreational Therapy Practicum <sup>1</sup>	3
RCTH 420	Recreational Therapy for Older Adults <sup>1</sup>	3
RCTH 422	Recreational Therapy Interventions I <sup>1</sup>	3
RCTH 450	Internship <sup>1,2</sup>	12

### Required Recreational Therapy Courses from other departments and Occupational Therapy Prerequisite courses

PE 364	Biomechanics of Individuals with Disabilities <sup>1</sup>	3
PSYC 276	Introduction to Abnormal Psychology	3
Subtotal		51
<b>Total Hours</b>		<b>51</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> Students must become certified in First Aid and CPR. This can be accomplished by taking a course (example: American Heart Assoc.)

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## ADDITIONAL OCCUPATIONAL THERAPY PREREQUISITE COURSES

Code	Title	Hours
EXSC 250	Medical Terminology	3
or HCAM 250	Medical Terminology for Healthcare Administrators	
Select one of the following:		3
SOWK 318	Research Methods	
INDP 318	Research Methods in Interdisciplinary Studies	
RCTH 390	Experimental (Experimental Course: Applied Research and Evidence-Based Practice)	
<b>Total Hours</b>		<b>6</b>

## NCTRC CERTIFICATION REQUIREMENTS

These courses must be completed by the student in order to be eligible to take NCTRC Certification Exam

Code	Title	Hours
PSYC 105	Introduction to Psychology <sup>1</sup>	3
PSYC 244	Developmental Psychology <sup>1</sup>	3
PSYC 276	Introduction to Abnormal Psychology	3
PE 360	Anatomical and Physiological Basis of Physical Activity/Lab	3
PE 364	Biomechanics of Individuals with Disabilities	3
PHIL 325	Medical/Health Care Ethics <sup>1</sup>	3
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

## CO-CURRICULAR AND EXPERIMENTAL LEARNING

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student

success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes
2. Student-faculty research
3. Student leadership development
4. Service-learning classes
5. Internships
6. Volunteering

## Doctor of Occupational Therapy (OTD) Prerequisite Admission Requirements – Pre-Occupational Therapy SRU 3+3

### For Application Requirements

Please refer to Slippery Rock University's Occupational Therapy Studies (Master of Science in Occupational Therapy Studies) website for requirements: <http://www.sru.edu/OT> (<http://www.sru.edu/OT/>)

### Rock Studies 2

Code	Title	Hours
<b>Prerequisite Courses - SRU Occupational Therapy</b>		
BIOL 209		4
BIOL 309		4
EXSC 250	Medical Terminology	3
or HCAM 250	Medical Terminology for Healthcare Administrators	
PHYS 201	Elements of Physics I with Lab	4
or PE 364	Biomechanics of Individuals with Disabilities	
STAT 152	Elementary Statistics I	3
PSYC 105	Introduction to Psychology	3
PSYC 244	Developmental Psychology	3
PSYC 276	Introduction to Abnormal Psychology	3
Anthropology or Sociology <sup>1</sup>		3
INDP 106	Race and Ethnic Diversity in the USA	
INDP 202	Introduction to Anthropology	
INDP 211	Biological Anthropology	
INDP 309	Health and Society	
INDP 310	Cultural Area Studies	
INDP 321	Minority Groups	
INDP 324	The Family	
INDP 326	Society, Culture and Self	
INDP 339	Gender Roles and Society	
INDP 342	Sociology of Aging	
RCTH 120	Disability, Community Inclusion, and Diversity	
SOWK 105	Human Diversity	
Research Methods - Select One: <sup>1</sup>		3
EXSC 300	Research Methods in Exercise Science	
HCAM 499	Health Care Theory and Research Capstone Seminar	
INDP 318	Research Methods in Interdisciplinary Studies	
PSYC 231/232	Psychological Science I: Research Methods	

SOWK 318	Research Methods
<b>Total Hours</b>	<b>33</b>

<sup>1</sup> Select one course. See *My Rock Audit* for specific courses.

### Pre-Occupational Therapy SRU 3+3

**If any of these requirements are not met, the 3+3 designation will be removed from the student's record:**

1. A 3.0 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Occupational Therapy SRU 3+3 program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

### Provision

Should a Pre-Occupational Therapy SRU 3+3 student be unsuccessful in completing the 1<sup>st</sup> two semesters (summer or fall) of the Occupational Therapy Program and wants to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, Occupational Therapy courses will count toward the completion of his/her undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the Doctor of Occupational Therapy Program with an earned Bachelor's degree.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

RECREATIONAL THERAPY - BS (6393)

PRE-OT SRU 3+3 (6RTO)

This program is effective as of Summer 2022

Revised 02.24.23

UCC 02.14.23

## RECOMMENDED THREE-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
RCTH 120	Disability, Community Inclusion, and Diversity	3
ENGL 102	Critical Writing	3
ESAP 101	FIRST Seminar <sup>1</sup>	1
PSYC 105	Introduction to Psychology	3
RCTH 220	Recreational Therapy Services	3
SUBJ 139	Foundations of Academic Discovery <sup>*</sup>	3
<b>Hours</b>		<b>16</b>

<b>Spring</b>		
RCTH 233 or RCTH 232	Recreational Therapy for People with Psychosocial and Mental Disorders or Recreational Therapy for People with Physical Disabilities	3
EXSC 250	Medical Terminology (Fulfills 21st Century Healthcare Thematic Thread requirement)	3
ENGL 104	Critical Reading	3
PSYC 244	Developmental Psychology	3
STAT 152	Elementary Statistics I	3
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>18</b>

**Second Year**

<b>Fall</b>		
RCTH 233 or RCTH 232	Recreational Therapy for People with Psychosocial and Mental Disorders or Recreational Therapy for People with Physical Disabilities	3
BIOL 216	Anatomy and Physiology I with Lab	3
INDP 201	Principles of Sociology	3
PSYC 276	Introduction to Abnormal Psychology	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Humanities Inquiry (p. 29)		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>18</b>

<b>Spring</b>		
RCTH 314	Clinical Aspects of Recreational Therapy	3
RCTH 317	Organization and Management of Recreational Therapy Practice	3
BIOL 217	Anatomy and Physiology II with Lab	3
INDP 318 or SOWK 318	Research Methods in Interdisciplinary Studies or Research Methods	3
Thematic Thread Requirement (p. 29)		3
PE 364	Biomechanics of Individuals with Disabilities	3
<b>Hours</b>		<b>18</b>

**Third Year**

<b>Fall</b>		
RCTH 319	Client Assessment in Recreational Therapy	3
RCTH 320	Recreational Therapy Program Design	3
RCTH 420	Recreational Therapy for Older Adults	3
RCTH 422	Recreational Therapy Interventions I	3
Thematic Thread Requirement (p. 29)		3
RCTH 351	Recreational Therapy Practicum	3
<b>Hours</b>		<b>18</b>

<b>Spring</b>		
RCTH 450	Internship	12

PHIL 325	Medical/Health Care Ethics	3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>103</b>

\* Course offered in multiple subjects; cannot take course in first major subject.

<sup>1</sup> Students are encouraged to take ESAP 101 as a Free Elective.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

Major Code: 6RTO

Revised: 12.10.2020

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

## Recreational Therapy, Bachelor of Science (BS) / Pre-Occupational Therapy (SRU) (Traditional)

### RECREATIONAL THERAPY PROGRAM LEARNING OUTCOMES

- **Degree Program Writing Competency:** Upon completion of the degree program RT students will write professionally and effectively, according to expectations of the Recreational Therapy profession. 1) UG 1 - Act as an effective communicator
- **Life-Long Learning:** Recognize the importance of lifelong learning and demonstrates responsibly for self-assessment and growth. This ability is evident through the demonstration of self initiating behaviors, anticipating and responding to changes in a productive manner, assuming responsibility for continuous self reflection assessment of strengths and limitations and in seeking out information from a variety of resources in an independent manner. 1) UG 5 - Develop as a whole person
- **Methodological Proficiency:** Upon completion of the degree program RT students will use an analytical framework to facilitate the Recreational Therapy process to meet the needs of individuals. The abilities developed include a solid knowledge of the RT process, assessment methods, planning skills, intervention, techniques and strategies, and evaluation skills. 1) UG 3- Develop scientific literacy, 2) UG 4 Apply quantitative reasoning in appropriate contexts
- **Professional Decision Making:** Analyze and synthesize complex information to make sound clinical decisions. This ability is inclusive of areas such as problem solving, critical thinking, evaluation and organization with application to clinical and non clinical areas. 1) UG 2 Apply critical thinking to argument and problem-solving.
- **Professional Interactions:** Effectively communicates with people in a variety of professional contexts including assisting clients in confronting and coping with life challenges, collaborating on teams and presenting information in oral and written formats. The abilities developed include striving to maintain objectivity, tolerating ambiguity, appreciating diversity and adhering to conventional standards of expression. 1) UG 5 Develop as a whole person, 2) UG 7 Become civically engaged

- **Valuing Ethical Responsibilities:** Act with professional values in all situations. These skills include maintaining appropriate humane and ethical treatment of individuals as well as upholding the professional code of ethics. This expertise includes formulating value judgments reflecting a respect for dignity and individuality of every person. 1) UG 8 Act Ethically

## What are your options?

**Pre-Occupational Therapy SRU 3+3:** Earn a Doctor of Occupational Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU OTD program. At the end of your second year, you apply for admission into the SRU OTD program. If accepted, your first year in the SRU OTD program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Occupational Therapy (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU OTD program and apply to the SRU OTD program in your senior year.

## RELATED LINKS

Recreational Therapy - Pre-Occupational Therapy, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/recreational-therapy-pre-occupational-therapy/>)

Recreational Therapy Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/recreational-therapy/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	43-44
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	60
	Professional Electives	12
	NCTRC Certification Requirements	18
	Electives	18

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
	<b>The Rock</b>	
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3

ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning <sup>2</sup>	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Science Inquiry</i>		
BIOL 209		4
<i>Physical Science Inquiry</i>		
PHYS 201	Elements of Physics I with Lab	3-4
or PE 364	Biomechanics of Individuals with Disabilities	
Subtotal		16-17

### Thematic Thread

Required Thematic Thread Coursework:		
EXSC 250	Medical Terminology	3
PHIL 325	Medical/Health Care Ethics	3
PSYC 105	Introduction to Psychology	3
Additional 300-400 Level Course		3

**Total Hours** **43-44**

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Consult with your academic adviser as course options are available to assist in meeting DOT prerequisite admission requirements.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	



PE 202

Technology for Wellness

**Total Hours** 0-3**DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT**

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

**MAJOR REQUIREMENTS**

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Recreational Therapy Courses</b>		
Must earn a "C" or better in all of the following RCTH courses:		
RCTH 120	Disability, Community Inclusion, and Diversity <sup>1</sup>	3
RCTH 220	Recreational Therapy Services <sup>1</sup>	3
RCTH 232	Recreational Therapy for People with Physical Disabilities <sup>1</sup>	3
RCTH 233	Recreational Therapy for People with Psychosocial and Mental Disorders <sup>1</sup>	3
RCTH 314	Clinical Aspects of Recreational Therapy <sup>1</sup>	3
RCTH 317	Organization and Management of Recreational Therapy Practice <sup>1</sup>	3
RCTH 319	Client Assessment in Recreational Therapy <sup>1</sup>	3
RCTH 320	Recreational Therapy Program Design <sup>1</sup>	3
RCTH 351	Recreational Therapy Practicum <sup>1</sup>	3
RCTH 415	Challenges and Trends in Recreational Therapy <sup>1</sup>	3
RCTH 420	Recreational Therapy for Older Adults <sup>1</sup>	3
RCTH 422	Recreational Therapy Interventions I <sup>1</sup>	3
RCTH 423	Recreational Therapy Interventions II <sup>1</sup>	3
RCTH 450	Internship <sup>1, 2</sup>	12
Subtotal		51
<b>Required Recreational Therapy Courses from Other Departments</b>		
PE 360	Anatomical and Physiological Basis of Physical Activity/Lab <sup>1</sup>	3
PE 364	Biomechanics of Individuals with Disabilities <sup>1</sup>	3
PSYC 244	Developmental Psychology <sup>1</sup>	3
Subtotal		9
<b>Total Hours</b>		<b>60</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> Students must become certified in First Aid and CPR prior to the internship

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**PROFESSIONAL ELECTIVES**

Code	Title	Hours
PHIL 325	Medical/Health Care Ethics	3
PSYC 105	Introduction to Psychology	3
PSYC 276	Introduction to Abnormal Psychology	3
Approved Professional Elective		3
<b>Total Hours</b>		<b>12</b>

**NCTRC CERTIFICATION REQUIREMENTS**

These courses must be completed by the student in order to be eligible to take NCTRC Certification Exam

Code	Title	Hours
PSYC 105	Introduction to Psychology	3
PSYC 244	Developmental Psychology	3
PSYC 276	Introduction to Abnormal Psychology	3
PE 360	Anatomical and Physiological Basis of Physical Activity/Lab	3
PE 364	Biomechanics of Individuals with Disabilities	3
PHIL 325	Medical/Health Care Ethics	3
<b>Total Hours</b>		<b>18</b>

**ADDITIONAL OCCUPATIONAL THERAPY PREREQUISITE COURSES**

Code	Title	Hours
Select from courses listed below (1 or other):		
INDP 318	Research Methods in Interdisciplinary Studies	3
SOWK 318	Research Methods	3
EXSC 250	Medical Terminology	3
or HCAM 250	Medical Terminology for Healthcare Administrators	

**CO-CURRICULAR AND EXPERIENTIAL LEARNING**

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes
2. Student-faculty research
3. Student leadership development
4. Service-learning classes
5. Internships
6. Volunteering

**Doctor of Occupational Therapy (OTD) Prerequisite Admission Requirements****For Application Requirements**

Please refer to Slippery Rock University's Occupational Therapy Studies (Master of Science in Occupational Therapy Studies) website for requirements: <http://www.sru.edu/OT> (<http://www.sru.edu/OT/>)

**Rock Studies 2**

Code	Title	Hours
<b>Prerequisite Courses - SRU Occupational Therapy</b>		
BIOL 209		4
BIOL 309		4
EXSC 250 or HCAM 250	Medical Terminology Medical Terminology for Healthcare Administrators	3
PHYS 201 or PE 364	Elements of Physics I with Lab Biomechanics of Individuals with Disabilities	4
STAT 152	Elementary Statistics I	3
PSYC 105	Introduction to Psychology	3
PSYC 244	Developmental Psychology	3
PSYC 276	Introduction to Abnormal Psychology	3
Research Methods - Select One: <sup>1</sup>		3
EXSC 300	Research Methods in Exercise Science	
HCAM 499	Health Care Theory and Research Capstone Seminar	
INDP 318	Research Methods in Interdisciplinary Studies	
PSYC 231 & PSYC 232	Psychological Science I: Research Methods and Psychological Science II: Statistical Applications	
SOWK 318	Research Methods	
Anthropology or Sociology - Select One: <sup>1</sup>		3
INDP 106	Race and Ethnic Diversity in the USA	
INDP 202	Introduction to Anthropology	
INDP 211	Biological Anthropology	
INDP 309	Health and Society	
INDP 310	Cultural Area Studies	
INDP 321	Minority Groups	
INDP 324	The Family	
INDP 326	Society, Culture and Self	
INDP 339	Gender Roles and Society	
INDP 342	Sociology of Aging	
RCTH 120	Disability, Community Inclusion, and Diversity	
SOWK 105	Human Diversity	
<b>Total Hours</b>		<b>33</b>

<sup>1</sup> Select one course. See My Rock Audit for specific courses.

**Important Curriculum Guide Notes**

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

RECREATIONAL THERAPY - BS (6393)

PRE-PT (SRU Traditional)

Effective Summer 2022

Revised 2.24.23

UCC 02.14.23

## Recreational Therapy, Bachelor of Science (BS) / Pre-Physical Therapy (SRU) (3+3)

### RECREATIONAL THERAPY PROGRAM LEARNING OUTCOMES

- **Degree Program Writing Competency:** Upon completion of the degree program RT students will write professionally and effectively, according to expectations of the Recreational Therapy profession. 1) UG 1 - Act as an effective communicator
- **Life-Long Learning:** Recognize the importance of lifelong learning and demonstrates responsibly for self-assessment and growth. This ability is evident through the demonstration of self initiating behaviors, anticipating and responding to changes in a productive manner, assuming responsibility for continuous self reflection assessment of strengths and limitations and in seeking out information from a variety of resources in an independent manner. 1) UG 5 - Develop as a whole person
- **Methodological Proficiency:** Upon completion of the degree program RT students will use an analytical framework to facilitate the Recreational Therapy process to meet the needs of individuals. The abilities developed include a solid knowledge of the RT process, assessment methods, planning skills, intervention, techniques and strategies, and evaluation skills. 1) UG 3- Develop scientific literacy, 2) UG 4 Apply quantitative reasoning in appropriate contexts
- **Professional Decision Making:** Analyze and synthesize complex information to make sound clinical decisions. This ability is inclusive of areas such as problem solving, critical thinking, evaluation and organization with application to clinical and non clinical areas. 1) UG 2 Apply critical thinking to argument and problem-solving.
- **Professional Interactions:** Effectively communicates with people in a variety of professional contexts including assisting clients in confronting and coping with life challenges, collaborating on teams and presenting information in oral and written formats. The abilities developed include striving to maintain objectivity, tolerating ambiguity, appreciating diversity and adhering to conventional standards of expression. 1) UG 5 Develop as a whole person, 2) UG 7 Become civically engaged
- **Valuing Ethical Responsibilities:** Act with professional values in all situations. These skills include maintaining appropriate humane and ethical treatment of individuals as well as upholding the professional code of ethics. This expertise includes formulating value judgments reflecting a respect for dignity and individuality of every person. 1) UG 8 Act Ethically

## What are your options?

**Pre-Physical Therapy SRU 3+3:** Earn a Doctor of Physical Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU DPT program. During your third undergraduate year, you apply for admission into the SRU DPT program. If accepted, your first year in the SRU DPT program meets the remaining requirements for your undergraduate degree. If not accepted,

you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Physical Therapy (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU DPT program and apply to the SRU DPT program in your senior year.

## RELATED LINKS

Recreational Therapy - Pre-Physical Therapy, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/recreational-therapy-pre-physical-therapy/>)

Recreational Therapy Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/recreational-therapy/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

#### 1<sup>st</sup> Major: Recreational Therapy

- Overall GPA: 2.0 or higher
- Major GPA includes Major Requirements: 2.0 or higher

#### 2<sup>nd</sup> Major: Pre-PT SRU 3+3 Recreational Therapy

- Overall GPA: 3.00 or higher

### SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	44
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	42
	NCTRC Certification Requirements	6
	Electives	35

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate. However, because this is a pre-professional program, credits taken during the 1<sup>st</sup> year of the graduate program are applied toward the undergraduate credit hours to meet the 120 credits required for your undergraduate degree.

### ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural and Physical Sciences Inquiry</i>		
PHYS 201	Elements of Physics I with Lab	4
BIOL 209		4
Subtotal		17
<b>Thematic Thread</b>		
Required Thematic Thread Coursework: <sup>2</sup>		12
PSYC 105	Introduction to Psychology	
PHIL 325	Medical/Health Care Ethics	
EXSC 250	Medical Terminology	
Additional 300-400 Level Course		
<b>Total Hours</b>		<b>44</b>

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.
- <sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this

requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## MAJOR REQUIREMENTS

- If you choose to pursue Pre-Physical Therapy SRU 3+3 Recreational Therapy and are not accepted into the DPT program, then additional coursework is required to complete a first major of Recreational Therapy. Please refer to the Recreational Therapy Curriculum Guide.

Code	Title	Hours
<b>Recreational Therapy Courses</b>		
Must earn a "C" or better in all of the following RCTH courses:		
RCTH 120	Disability, Community Inclusion, and Diversity <sup>1</sup>	3
RCTH 220	Recreational Therapy Services <sup>1</sup>	3
RCTH 232	Recreational Therapy for People with Physical Disabilities <sup>1</sup>	3
RCTH 233	Recreational Therapy for People with Psychosocial and Mental Disorders <sup>1</sup>	3
RCTH 314	Clinical Aspects of Recreational Therapy <sup>1</sup>	3
RCTH 317	Organization and Management of Recreational Therapy Practice <sup>1</sup>	3
RCTH 319	Client Assessment in Recreational Therapy <sup>1</sup>	3
RCTH 320	Recreational Therapy Program Design <sup>1</sup>	3
RCTH 420	Recreational Therapy for Older Adults <sup>1</sup>	3
RCTH 422	Recreational Therapy Interventions I <sup>1</sup>	3
RCTH 450	Internship <sup>1</sup>	12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## NCTRC CERTIFICATION REQUIREMENTS

These courses must be completed by the student in order to be eligible to take NCTRC Certification Exam

Code	Title	Hours
PHIL 325	Medical/Health Care Ethics	3
PSYC 276	Introduction to Abnormal Psychology	3
<b>Total Hours</b>		<b>6</b>

## ADDITIONAL PHYSICAL THERAPY PREREQUISITE COURSES

Code	Title	Hours
BIOL 209		
BIOL 309		
CHEM 107	General Chemistry I	3
CHEM 108	General Chemistry II	3
CHEM 111	General Chemistry I Lab	1
CHEM 112	General Chemistry II Lab	1
PHYS 201	Elements of Physics I with Lab	4
PHYS 202	Elements of Physics II/ Lab	4
PSYC 244	Developmental Psychology	3

STAT 152	Elementary Statistics I	3
<b>Total Hours</b>		<b>22</b>

## CO-CURRICULAR AND EXPERIMENTAL LEARNING

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes
2. Student-faculty research
3. Student leadership development
4. Service-learning classes
5. Internships
6. Volunteering

## Doctor of Physical Therapy (DPT)

### Prerequisite Admission Requirements – Pre-Physical Therapy SRU 3+3

#### For Application Requirements

Please refer to Slippery Rock University's Physical Therapy (Doctor of Physical Therapy) website for requirements: [www.sru.edu/PT/](http://www.sru.edu/PT/) (<http://www.sru.edu/PT/>).

## Rock Studies 2

Code	Title	Hours
<b>Prerequisite Courses - SRU Physical Therapy</b>		
Select one of the following:		6-8
BIOL 209 & BIOL 309	and	
BIOL 340 & BIOL 410	Vertebrate Anatomy with Lab and Animal Physiology with Lab	
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
Select one of the following:		8
PHYS 201 & PHYS 202	Elements of Physics I with Lab and Elements of Physics II/ Lab	
PHYS 216 & PHYS 217	University Physics 1 with Lab and University Physics 2 with Lab	
STAT 152 or BIOL 325	Elementary Statistics I Biometry with Lab	3
PSYC 105	Introduction to Psychology	3
Additional Psychology Course <sup>1</sup>		3
<b>Total Hours</b>		<b>31-33</b>

<sup>1</sup> See My Rock Audit for specific courses.

## Requirements for Pre-Physical Therapy SRU 3+3

If any of these requirements are not met, the 3+3 designation will be removed from the student's record:

1. A 3.0 or higher overall GPA must be maintained by the student.
2. The student can only be enrolled in the Pre-Physical Therapy SRU 3+3 program for a maximum of three (3) years, full-time continuous enrollment (fall/spring).

### Provision

Should a Pre-Physical Therapy SRU 3+3 student be unsuccessful in completing the 1st two semesters (fall or spring) of the Doctor of Physical Therapy Program and wants to complete the original undergraduate degree, it is solely up to the discretion of the undergraduate program Department Chair to determine which, if any, Physical Therapy courses will count toward the completion of his/her undergraduate degree. In addition, students must complete any unfulfilled requirements of their undergraduate major. Students may still apply to the Doctor of Physical Therapy Program with an earned Bachelor's degree.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

RECREATIONAL THERAPY - BS (6393)

PRE-PT SRU 3+3 (63P2)

This program is effective as of Summer 2022

Revised 02.24.23

UCC 02.14.23

### RECOMMENDED THREE-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
RCTH 120	Disability, Community Inclusion, and Diversity	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
PSYC 105	Introduction to Psychology	3
PHYS 201	Elements of Physics I with Lab	4
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
RCTH 220	Recreational Therapy Services	3
ENGL 104	Critical Reading	3
PSYC 244	Developmental Psychology	3
PHYS 202	Elements of Physics II/ Lab	4
Creative & Aesthetic Inquiry (p. 29)		3
RCTH 232 or RCTH 233	Recreational Therapy for People with Physical Disabilities or Recreational Therapy for People with Psychosocial and Mental Disorders	3
<b>Hours</b>		<b>19</b>

### Second Year

#### Fall

RCTH 232 or RCTH 233	Recreational Therapy for People with Physical Disabilities or Recreational Therapy for People with Psychosocial and Mental Disorders	3
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
PSYC 276	Introduction to Abnormal Psychology	3
STAT 152	Elementary Statistics I	3
Humanities Inquiry (p. 29)		3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Declare a Thematic Thread <sup>2</sup>		

**Hours 19**

#### Spring

RCTH 314	Clinical Aspects of Recreational Therapy	3
RCTH 317	Organization and Management of Recreational Therapy Practice	3
BIOL 216	Anatomy and Physiology I with Lab	3
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
Social Science Inquiry (p. 29)		3

**Hours 16**

### Third Year

#### Fall

RCTH 319	Client Assessment in Recreational Therapy	3
RCTH 320	Recreational Therapy Program Design	3
RCTH 420	Recreational Therapy for Older Adults	3
RCTH 422	Recreational Therapy Interventions I	3
Thematic Thread Requirement (p. 29)		3
BIOL 217	Anatomy and Physiology II with Lab	3

**Hours 18**

#### Spring

RCTH 450	Internship	12
PHIL 325	Medical/Health Care Ethics	3
Thematic Thread Requirement (p. 29)		3

**Hours 18**

**Total Hours\*\* 107**

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

Major code: 63P2

Revised: 12.06.2021



# Recreational Therapy, Bachelor of Science (BS) / Pre-Physical Therapy (SRU) (Traditional)

## RECREATIONAL THERAPY PROGRAM LEARNING OUTCOMES

- **Degree Program Writing Competency:** Upon completion of the degree program RT students will write professionally and effectively, according to expectations of the Recreational Therapy profession. 1) UG 1 - Act as an effective communicator
- **Life-Long Learning:** Recognize the importance of lifelong learning and demonstrates responsibly for self-assessment and growth. This ability is evident through the demonstration of self initiating behaviors, anticipating and responding to changes in a productive manner, assuming responsibility for continuous self reflection assessment of strengths and limitations and in seeking out information from a variety of resources in an independent manner. 1) UG 5 - Develop as a whole person
- **Methodological Proficiency:** Upon completion of the degree program RT students will use an analytical framework to facilitate the Recreational Therapy process to meet the needs of individuals. The abilities developed include a solid knowledge of the RT process, assessment methods, planning skills, intervention, techniques and strategies, and evaluation skills. 1) UG 3- Develop scientific literacy, 2) UG 4 Apply quantitative reasoning in appropriate contexts
- **Professional Decision Making:** Analyze and synthesize complex information to make sound clinical decisions. This ability is inclusive of areas such as problem solving, critical thinking, evaluation and organization with application to clinical and non clinical areas. 1) UG 2 Apply critical thinking to argument and problem-solving.
- **Professional Interactions:** Effectively communicates with people in a variety of professional contexts including assisting clients in confronting and coping with life challenges, collaborating on teams and presenting information in oral and written formats. The abilities developed include striving to maintain objectivity, tolerating ambiguity, appreciating diversity and adhering to conventional standards of expression. 1) UG 5 Develop as a whole person, 2) UG 7 Become civically engaged
- **Valuing Ethical Responsibilities:** Act with professional values in all situations. These skills include maintaining appropriate humane and ethical treatment of individuals as well as upholding the professional code of ethics. This expertise includes formulating value judgments reflecting a respect for dignity and individuality of every person. 1) UG 8 Act Ethically

## What are your options?

**Pre-Physical Therapy SRU 3+3:** Earn a Doctor of Physical Therapy in six years rather than seven. In the first three years, you complete your major courses and pre-requisites for the SRU DPT program. During your third undergraduate year, you apply for admission into the SRU DPT program. If accepted, your first year in the SRU DPT program meets the remaining requirements for your undergraduate degree. If not accepted, you continue to complete your undergraduate degree and can reapply to the program. The accelerated option is for incoming freshmen only.

**Pre-Physical Therapy (SRU Traditional):** Complete the requirements for your major and the pre-requisites for the SRU DPT program and apply to the SRU DPT program in your senior year.

## RELATED LINKS

Recreational Therapy - Pre-Physical Therapy, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/recreational-therapy-pre-physical-therapy/>)

Recreational Therapy Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/recreational-therapy/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	43-44
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	51
	Professional Electives	12
	NCTRC Certification Requirements	18
	Electives	26

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
	Select one of the following: <sup>2</sup>	3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
STAT 152	Elementary Statistics I	3
	Subtotal	15

#### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
	Select 3 Credits (p. 29)	3
<i>Humanities Inquiry</i>		
	Select 3 Credits (p. 29)	3
<i>Social Science Inquiry</i>		
	Select 3 Credits (p. 29)	3
<i>Natural Sciences Inquiry</i> <sup>2</sup>		
BIOL 209		4
<i>Physical Sciences Inquiry</i>		
PHYS 201	Elements of Physics I with Lab	4
	Subtotal	17

Thematic Thread

Required Thematic Thread Coursework: <sup>2,3</sup>		12
PHIL 325	Medical/Health Care Ethics	
PSYC 105	Introduction to Psychology	
Additional 100-200 Level Course		
Additional 300-400 Level Course		

<b>Total Hours</b>	<b>44</b>
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- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.
- <sup>2</sup> Consult with your academic adviser as course options are available to assist in meeting DPT prerequisite coursework.
- <sup>3</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

MAJOR REQUIREMENTS

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Recreational Therapy Courses</b>		
Must earn a "C" or better in all of the following RCTH courses:		

RCTH 120	Disability, Community Inclusion, and Diversity <sup>1</sup>	3
RCTH 220	Recreational Therapy Services <sup>1</sup>	3
RCTH 232	Recreational Therapy for People with Physical Disabilities <sup>1</sup>	3
RCTH 233	Recreational Therapy for People with Psychosocial and Mental Disorders <sup>1</sup>	3
RCTH 314	Clinical Aspects of Recreational Therapy <sup>1</sup>	3
RCTH 317	Organization and Management of Recreational Therapy Practice <sup>1</sup>	3
RCTH 319	Client Assessment in Recreational Therapy <sup>1</sup>	3
RCTH 320	Recreational Therapy Program Design <sup>1</sup>	3
RCTH 351	Recreational Therapy Practicum <sup>1</sup>	3
RCTH 415	Challenges and Trends in Recreational Therapy <sup>1</sup>	3
RCTH 420	Recreational Therapy for Older Adults <sup>1</sup>	3
RCTH 422	Recreational Therapy Interventions I <sup>1</sup>	3
RCTH 423	Recreational Therapy Interventions II <sup>1</sup>	3
RCTH 450	Internship <sup>1, 2</sup>	12
Subtotal		51
<b>Total Hours</b>		<b>51</b>

- <sup>1</sup> Course counts for 50% of Major requirements and Major GPA
- <sup>2</sup> Students must become certified in First Aid and CPR prior to the internship
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

NCTRC CERTIFICATION REQUIREMENTS

These courses must be completed by the student in order to be eligible to take NCTRC Certification Exam

Code	Title	Hours
PE 360	Anatomical and Physiological Basis of Physical Activity/Lab	3
PE 364	Biomechanics of Individuals with Disabilities	3
PHIL 325	Medical/Health Care Ethics	3
PSYC 105	Introduction to Psychology	3
PSYC 244	Developmental Psychology	3
PSYC 276	Introduction to Abnormal Psychology	3
<b>Total Hours</b>		<b>18</b>

ADDITIONAL PHYSICAL THERAPY PREREQUISITE COURSES

Code	Title	Hours
BIOL 209		
BIOL 309		
CHEM 107	General Chemistry I	3
CHEM 108	General Chemistry II	3
CHEM 111	General Chemistry I Lab	1
CHEM 112	General Chemistry II Lab	1
PHYS 201	Elements of Physics I with Lab	4

PHYS 202	Elements of Physics II/ Lab	4
PSYC 244	Developmental Psychology	3
STAT 152	Elementary Statistics I	3

## CO-CURRICULAR AND EXPERIENTIAL LEARNING

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. High-Impact Practice (HIP) designated classes
2. Student-faculty research
3. Student leadership development
4. Service-learning classes
5. Internships
6. Volunteering

## Doctor of Physical Therapy (DPT) Prerequisite Admission Requirements

### For Application Requirements

Please refer to Slippery Rock University's Physical Therapy (Doctor of Physical Therapy) website for requirements: [www.sru.edu/PT/](http://www.sru.edu/PT/) (<http://www.sru.edu/PT/>)

### Rock Studies 2

Code	Title	Hours
<b>Prerequisite Courses - SRU Physical Therapy</b>		
Select one of the following:		6-8
BIOL 209 & BIOL 309	and	
BIOL 340 & BIOL 410	Vertebrate Anatomy with Lab and Animal Physiology with Lab	
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
Select one of the following:		8
PHYS 201 & PHYS 202	Elements of Physics I with Lab and Elements of Physics II/ Lab	
PHYS 211 & PHYS 213	General Physics I with Lab and General Physics III/ Lab	
STAT 152 or BIOL 325	Elementary Statistics I Biometry with Lab	3
PSYC 105	Introduction to Psychology	3
Additional Psychology Course <sup>1</sup>		3
<b>Total Hours</b>		<b>31-33</b>

<sup>1</sup> See My Rock Audit for specific courses.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information*

*on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

RECREATIONAL THERAPY - BS

PRE-PT (SRU Traditional)

Effective Summer 2022

Revised 02.24.23

UCC 02.14.23

## Recreational Therapy, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## RELATED LINKS

Recreational Therapy, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/recreational-therapy/>)

Recreational Therapy Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/recreational-therapy/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Minor GPA: 2.0 or higher

### MINOR REQUIREMENTS

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Recreational Therapy Courses</b>		
RCTH 120	Disability, Community Inclusion, and Diversity	3
RCTH 220	Recreational Therapy Services	3
RCTH 314	Clinical Aspects of Recreational Therapy	3
RCTH 319	Client Assessment in Recreational Therapy	3
RCTH 320	Recreational Therapy Program Design	3
RCTH 351	Recreational Therapy Practicum	3
RCTH 423	Recreational Therapy Interventions II	3
Select one of the following courses:		3
RCTH 232	Recreational Therapy for People with Physical Disabilities	
RCTH 233	Recreational Therapy for People with Psychosocial and Mental Disorders	
RCTH 420	Recreational Therapy for Older Adults	
<b>Total Hours</b>		<b>24</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Minor in Recreational Therapy (71B)  
This program is effective as of 2015.  
Revised: 10.28.2021

## Social Work

Chair	Secretary	Location	Department Phone
Dr. Yvonne Eaton-Stull	Michelle McFeely	4 Jack Dinger Annex	724-738-2705

Department Web Site URL (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/social-work/>)

Department Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/socialwork-fs.pdf>)

## Faculty

### Kristie Abbs

Assistant Professor  
Social Work  
D.S.W., Capella University  
M.Ed., Slippery Rock University  
M.S.W., Ohio State University  
B.S., Radford University

### Thomas Bechard

Assistant Professor  
Social Work  
D.S.W., Adelphia University  
M.S.W., Barry University  
B.A., University of Maine  
B.A., Hubertus College

### Yvonne Eaton-Stull

Associate Professor  
Social Work  
D.S.W., Capella University  
M.S.W., Boston College  
B.A., Clarion University

### Denna Hays

Assistant Professor  
Social Work  
D.S.W., Capella University  
M.S.W., University of Pittsburgh  
B.S., Slippery Rock University

### Tracy Leet

Instructor

Social Work

M.S.W., Edinboro University  
B.S.Ed., Slippery Rock University

### Bonnie Marsh

Assistant Professor  
Social Work  
D.S.W., Kutztown University  
M.S.W., University of Pittsburgh  
B.S.W., Penn State University

### Tami Micsky

Assistant Professor  
Social Work  
D.S.W., Millersville University  
M.S.S.A., Case Western Reserve University  
B.S., Edinboro University

### Christopher Streidl

Assistant Professor  
Social Work  
Ph.D., Walden University  
M.S.W., Wayne State University  
B.S.W., University of Toledo

### Christophas Walker

Associate Professor  
Social Work  
Ph.D., University of Pittsburgh  
M.Ed., University of Pittsburgh  
B.A., University of Pittsburgh

### Eunice Yeboah

Assistant Professor  
Social Work  
Ph.D., Southern Illinois University  
M.S.W., Southern Illinois University  
B.A., University of Ghana

## PROGRAMS

### MAJORS

- Social Work, Bachelor of Science (BS) (p. 767)

### MINORS

- Social Work, Minor (p. 770)

## Courses

### SOWK 105 - Human Diversity

An orientation to living and working with diverse populations within modern American society, including examination of the strengths and stresses associated with diversities.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**SOWK 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**SOWK 170 - Cultural Competence and Social Change**

This course is designed to provide an overview of social issues to increase student understanding of the problems faced by societies today. Students will enhance their skills in critical thinking to analyze and acknowledge complexities in social issues, assessing problems, advocating and facilitating change.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**SOWK 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SOWK 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**SOWK 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SOWK 200 - Introduction to Child Welfare**

Provides an overview of the child welfare system in the United States, including the history of the development of child welfare policies, programs, and services; exploring best practices in child welfare; and examining current and future issues and problems in this field.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Transfer Thread Completion Course

**SOWK 230 - Social Justice and Equality**

This course provides an overview of Frederick Douglass' perspectives on injustice and racial prejudice, which will be examined from his life experiences as a former slave who became the pre-eminent voice of the liberation struggle. The historical context of Douglass' life will be compared and contrasted to contemporary issues of race, ethnicity, freedom and diversity awareness.

Credits: 3

Term(s) Typically Offered: Offered Winter, Spring&Summer

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course

**SOWK 251 - Introduction to Social Work**

An orientation to the field of social work and social work activities in the community. Includes service learning.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**SOWK 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SOWK 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**SOWK 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SOWK 300 - Crisis Intervention**

This course focuses on practice skills to effectively recognize and intervene in crises. This course examines factors influencing the development of crises, identification of potential crises and use of de-escalation skills. This course will focus on developing effective crisis intervention skills and techniques for a variety of crisis situations.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course

Students with a semester level of Freshman 1 or Freshman 2 may **not** enroll.



**SOWK 310 - Animal Assisted Interventions**

This course is designed to provide students with an understanding of the human-animal bond and how this relationship can foster interventions in the human service and health care fields. Students will learn several animal-assisted interventions, beneficial effects and how they are implemented with diverse groups in various practice settings.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1 or Freshman 2 may **not** enroll.

**SOWK 311 - Clinical and Academic Documentation for Social Work**

This course will assist students in developing strong clinical documentation skills for social work practice. Students will be exposed and practice various types of clinical documentation. Additionally, students will enhance their clinical and academic writing by creating a portfolio of various documents.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SOWK 318 - Research Methods**

Major methods and procedures used in social work and sociological research.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Social Work.

**SOWK 319 - Statistical Methods**

Introduction to basic statistical concepts and research techniques used in social research. Also listed as PROF 317

Prerequisite: SOWK 318<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment is limited to students with a program in Social Work.

**SOWK 321 - Forensic Social Work**

This course applies social work principles to various aspects of the legal system. Students will address legal rights, policies and practice in various forensic settings and with clients involved with the law and legal system.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SOWK 328 - Human Behavior and the Social Environment**

Covers the biophysical, psychological, and social dimensions assessing social functioning during pregnancy, birth, newborn, infancy, and early childhood, middle childhood and adolescence, young and late adulthood.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Social Work or Social Work.

**SOWK 334 - Clinical Perspectives on DSM Diagnoses**

Course content related to taxonomy, etiology, and diagnostic impressions of psychiatric disorders will be presented. Social Work services will be analyzed in relation to the disorders.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Criminology & Criminal Justice or Social Work.

**SOWK 340 - Social Welfare Institutions**

An introductory analysis of social welfare policies, issues, and institutions.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Social Work.

**SOWK 355 - Social Work Practice with Individuals**

Principles and practice of interviewing processes as applied to casework methods. Grade of C or better is required in this course.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Social Work.

**SOWK 356 - Social work Practice with Groups & Families**

Expands knowledge and skills base to include social work practice with family and group systems. Grade of C or better is required in this course.

Prerequisite: SOWK 355<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Social Work.

**SOWK 357 - Social Work Practice with Organizations and Communities**

Expands knowledge and skills base to include social work practice in communities and larger social systems. Grade of C or better is required in this course.

Prerequisites: SOWK 340<sup>D</sup> and SOWK 356<sup>C</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Social Work.

**SOWK 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SOWK 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**SOWK 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SOWK 407 - Social Policy Issues**

Problems and issues associated with social policy including the politics of welfare policy.

Prerequisites: SOWK 251<sup>D</sup> and SOWK 340<sup>\*D</sup> (may be taken concurrently).

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Social Work.

**SOWK 450 - SOWK Internship**

A Social Work Internship.

Corequisite(s): SOWK 460

Credits: 1-12

Term(s) Typically Offered: Offered Spring & Summer Terms

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a major in Social Work.

**SOWK 460 - Social Work Integrative Seminar**

This senior level course integrates a four year social work curriculum with emphasis on knowledge base and skill acquisition for working in micro, mezzo, macro and research practice. This course will be a corequisite with SOWK 450 (Internship)

Corequisite(s): SOWK 450

Credits: 3

Term(s) Typically Offered: Offered Spring & Summer Terms

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a major in Social Work.

**SOWK 490 - Independent Study**

Independent research under the guidance of a faculty member.

Prerequisite: Permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. (repeatable up to 6 credits) Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SOWK 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**SOWK 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Social Work, Bachelor of Science (BS)

**Program Director:** Dr. Tami Micsky

Social work is a profession that applies knowledge about people and society to help persons, groups, or communities meet a diversity of needs, solve a wide range of problems, promote social justice, and assist people in becoming empowered. The baccalaureate program in social work prepares students for generalist social work practice. As beginning professional social workers, graduates typically work in the areas of child welfare, juvenile and adult corrections, public assistance, health and mental health, aging domestic violence, and chemical dependency, among others.

The undergraduate program in social work awards a Bachelor of Science degree in Social Work and is accredited by the Council on Social Work Education, the national accrediting agency for social work. Accreditation standards require a solid core of courses on social welfare issues and policies, social work practice skills, basic social science research methods, and a broad background in the liberal arts with special emphasis on psychology, biology, economics, politics, sociology, organization, and diverse ethnic groups. In fulfilling the academic requirements for social work, students must also uphold the values of the profession of Social Work as expressed in the National Association of Social Work's Code of Ethics.

While Pennsylvania requires a master's degree to become a licensed social worker, some states license social workers holding a bachelor's degree. Since requirements vary by state, please check with the licensing board in the state you intend to practice.

## Program Learning Outcomes

The six goals of the Social Work Program are as follows:

1. To graduate students with a baccalaureate (B.S.) degree in Social Work who are competent to begin generalist social work practice.
2. To graduate students who are well prepared to enter graduate schools of Social Work, either directly after receiving the undergraduate degree, or after a period of practice.
3. To contribute to the intellectual, ethical, and emotional development of our students in order to enhance their awareness and involvement as citizens in the broad social welfare issues of our times.
4. To sensitize students to the human condition in order that they might develop a respect for human dignity, diversity, and freedom.

- For students who are uncertain about a career choice, to provide a clear and honest introduction to the responsibilities and rewards of a Social Work career, so that they can make informed career choices.
- To help meet the human resource needs for baccalaureate level social workers in the diverse mix of rural, small town, and metropolitan areas from which our students come and to which many wish to return.

## Related Links

Social Work, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/social-work/>)

Social Work Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/social-work/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	54
	Electives	24

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3

<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

- Course offered in multiple subjects; cannot take course in first major subject.
- One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

### Major Requirements

- 27 major credits must be taken at SRU or PASSHE
- 27 major credits must be taken at the 300 level or above
- ACT 34 (Criminal History) and ACT 151 (Child Abuse) clearances are required for admission to the Social Work program.
- Students must have a cumulative GPA of 2.0 for admission to the Social Work program.

Code	Title	Hours
<b>Core Course (Other Disciplines)</b>		
Select one of the following:		3

PSYC 105	Introduction to Psychology <sup>1,2</sup>	
INDP 201	Principles of Sociology <sup>1,2</sup>	
Subtotal		3
<b>Required Core Courses – Social Work</b>		
SOWK 105	Human Diversity <sup>1</sup>	3
SOWK 251	Introduction to Social Work <sup>1</sup>	3
SOWK 328	Human Behavior and the Social Environment <sup>1</sup>	3
SOWK 340	Social Welfare Institutions <sup>1</sup>	3
SOWK 355	Social Work Practice with Individuals <sup>1</sup>	3
SOWK 356	Social work Practice with Groups & Families <sup>1</sup>	3
SOWK 357	Social Work Practice with Organizations and Communities <sup>1</sup>	3
SOWK 407	Social Policy Issues <sup>1</sup>	3
SOWK 450	SOWK Internship <sup>1</sup>	12
SOWK 460	Social Work Integrative Seminar <sup>1</sup>	3
Subtotal		39
<b>Research Methods</b>		
SOWK 318	Research Methods <sup>1</sup>	3
SOWK 319	Statistical Methods <sup>1</sup>	3
Subtotal		6
<b>Social Work Electives</b>		
Select two of the following:		6
SOWK 200	Introduction to Child Welfare <sup>1</sup>	
SOWK 230	Social Justice and Equality <sup>1</sup>	
SOWK 300	Crisis Intervention <sup>1</sup>	
SOWK 310	Animal Assisted Interventions	
SOWK 311	Clinical and Academic Documentation for Social Work	
SOWK 321	Forensic Social Work	
SOWK 334	Clinical Perspectives on DSM Diagnoses	
Subtotal		6
<b>Total Hours</b>		<b>54</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Field trips
2. Career Education
3. Internships/ Field Experience
4. High-Impact Practice (HIP) designated classes
5. Job shadowing
6. Community Engaged Learning

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

SOCIAL WORK - BS (6181)

This program is effective as of Fall 2019.

Revised 04.21.22

UCC 2.5.2019

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
SOWK 105	Human Diversity	3
INDP 201 or PSYC 105	Principles of Sociology or Introduction to Psychology	3
ENGL 102	Critical Writing	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ESAP 101	FIRST Seminar *	1
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
SOWK 251	Introduction to Social Work	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
MATH 117	Quantitative Reasoning	3
ENGL 104	Critical Reading	3
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
SOWK 328	Human Behavior and the Social Environment	3
SOWK 318	Research Methods	3
SOWK 355	Social Work Practice with Individuals	3
SCI 101	Science of Life	3
Social Science Inquiry (p. 29)		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
SOWK 319	Statistical Methods	3
SOWK 356	Social work Practice with Groups & Families	3
SCI 102	Understanding the Physical World	3

Elective	3
Thematic Thread Requirement (p. 29)	3
<b>Hours</b>	<b>15</b>

**Third Year**

<b>Fall</b>		
SOWK 340	Social Welfare Institutions	3
SOWK 357	Social Work Practice with Organizations and Communities	3
Rock Studies 2 Thread course OR Social Work Elective (p. 29)		3
Rock Studies 2 Thread course OR Elective (p. 29)		3
Rock Studies 2 Thread course OR Social Work Elective (p. 29)		3
<b>Hours</b>		<b>15</b>

**Spring**

SOWK 407	Social Policy Issues	3
Social Work Elective		3
Thematic Thread Requirement (p. 29)		3
Elective		3
Elective		3
<b>Hours</b>		<b>15</b>

**Fourth Year**

<b>Fall</b>		
Rock Studies 2 Thread course OR Social Work Elective (p. 29)		3
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
Elective		3
Elective		3
<b>Hours</b>		<b>15</b>

**Spring**

SOWK 450	SOWK Internship (S or summer)	12
SOWK 460	Social Work Integrative Seminar (S or summer)	3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 6181

Reviewed: 04.21.2022

## Social Work, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Social Work, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/social-work/>)

Social Work Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/social-work/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.00 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Core Courses</b>		
SOWK 251	Introduction to Social Work	3
SOWK 328	Human Behavior and the Social Environment	3
SOWK 340	Social Welfare Institutions	3
<b>Social Work Electives</b>		
Select three of the following, at least one at 300 level or higher:		9
SOWK 105	Human Diversity	
SOWK 200	Introduction to Child Welfare	
SOWK 230	Social Justice and Equality	
SOWK 300	Crisis Intervention	
SOWK 310	Animal Assisted Interventions	
SOWK 311	Clinical and Academic Documentation for Social Work	
SOWK 318	Research Methods	
SOWK 319	Statistical Methods	
SOWK 321	Forensic Social Work	
SOWK 334	Clinical Perspectives on DSM Diagnoses	
<b>Total Hours</b>		<b>18</b>

- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*



PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN SOCIAL WORK(80B)

This program is effective as of Fall 2009

Revised 8-2019

## College of Liberal Arts

### Dean's Office Staff

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## Departments

- Art (p. 771)
- Criminology and Criminal Justice (p. 836)
- Dance (p. 850)
- Gender Studies (p. 870)
- History (p. 872)
- Homeland/Corporate Security and Leadership (p. 887)
- Languages, Literatures, Cultures, and Writing (p. 912)
- Library (p. 951)
- Music (p. 952)
- Nonprofit Management, Empowerment and Diversity Studies (p. 1012)
- Philosophy (p. 1047)
- Political Science (p. 1058)
- Theatre (p. 1079)

## Art

Chair	Secretary	Location	Department Phone
Mr. Sean Macmillan	Renee Hazlet	200 Art Building	724-738-2020

Department Web Site URL (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/art/>)

Department Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/art-fs.pdf>)

## The Rock Difference

Students who major in art will develop the capacity to make tangible their aesthetic responses to experience. By increasing awareness of themselves, their environment and their culture, and by learning to think and act creatively, students prepare themselves for a life enriched through art. The broadly based Bachelor of Arts program with a concentration in art provides a diversified background suitable to generalist applications and an excellent foundation for further study in various disciplines. The Bachelor of Fine Arts degree program is for students interested in art as a profession. It is an intensive program of study aimed at developing a foundation of attitudes, traits and abilities with which to begin a lifetime as an artist. Emphasis is placed on students' personal experiences as the source of artistic motivation. The broadly based rock studies curriculum provides students with a diversified background, which, in concert with their professional training, should lead to a successful career in art and applied vocations.

*"The encouragement and support I received from the faculty and students in the Art Department at Slippery Rock University enabled me to gain the confidence to make it as a professional artist. The instruction I received provided both a practical and philosophic foundation that continues to contribute to my success as artist and teacher."*

**John Greco**  
BA '76  
Professor of Art  
Santa Monica College

*"Being creative and skilled are the keys to surviving in today's fast paced environment. The experience in the Art Department at Slippery Rock University prepared me to succeed in graduate school and in my professional career where constant change challenges all assumptions."*

**Dalton Good**  
BFA '81  
Director of Publications  
Point Park College

The Art Department sponsors regional and national travel opportunities to visit galleries and museums in cities such as Boston, Philadelphia, Toronto, New York, Washington, D.C. or Chicago each semester. Faculty organize day trips to exhibits in Cleveland and Pittsburgh several times each term. The department has developed exchange programs with excellent art schools in Europe and Costa Rica to provide students with the opportunity for an international experience. Students have the opportunity to spend a semester studying and traveling in Europe or Costa Rica, experiencing different cultures. More than 100 students have participated in these exchanges.

Art faculty periodically take students to various professional society meetings such as the National Society for Education in Ceramic Arts, International Sculpture Society and Southern Graphics Society annual meetings. At these meetings students meet and get to know professionals in their field. They have an opportunity to attend lectures and demonstrations on the latest techniques being developed.

Each term, in our master studio program, the Art Department has visiting artists come to campus for workshops, lectures and critiques of student work. This program enables the student to know and experience the broadest possibilities in their own work.

Each year, the final exhibition in the campus gallery is devoted to an exhibit of student art. For this show, an invited juror judges the show, awarding prizes and scholarships for the coming year.

Students may elect to do an internship in their junior or senior year. Internships allow the student to sharpen skills learned in the classroom in a professional, working atmosphere. Students complete internships in various museums and galleries, and in photography, architectural, ceramic and graphic design studios. While interning, students gain a working knowledge in their chosen field, make contacts with professional artists, and learn to use the ideas and techniques practiced in the classroom.

The Art Society, a student run Art organization, coordinates field trips to special art exhibitions, raises monies for entry fees to local art exhibitions and sponsors exhibitions of their work to show in local galleries.

## Faculty

### **Theresa Antonellis**

Instructor

Art

M.F.A., University of Massachusetts Amherst

B.A., Mount Holyoke College

### **Tricia Bishop**

Assistant Professor

Art

M.F.A., Syracuse University

B.F.A., Howard University

### **Matthew Conboy**

Instructor

Art

Ph.D., Ohio University

M.F.A., Virginia Commonwealth University

B.S., Catholic University of America

### **Emily Elliott**

Assistant Professor

Art

### **Heather Hertel**

Professor

Art

M.F.A., Edinboro University

M.S., Syracuse University

B.F.A., Syracuse University

### **Sean Macmillan**

Associate Professor

Art

M.F.A., University of Kansas

B.F.A., Edinboro University

### **Katherine Mickle**

Associate Professor

Art

M.F.A., Ohio State University

M.A., Stephen Austin State University

B.F.A., Slippery Rock University

### **Kurt Pitluga**

Assistant Professor

Art

Ph.D., Pennsylvania State University

M.A., Pennsylvania State University

B.A., Edinboro University

### **Doris Short**

Assistant Professor

Art

B.F.A., Koge College

B.S., Art Institute of Pittsburgh

### **Jon Shumway**

Professor

Art

M.F.A., University of Iowa

M.A., University of Iowa

B.A., Luther College

### **Barbara Westman**

Professor

Art

M.F.A., Academy of Fine Arts-Poland

B.A., Schola Posnaniensis/School of Applied Art

## Programs

All first-year students who enter SRU in the Summer and Fall terms of 2019 and after will follow Rock Studies. Students who entered SRU before Spring 2019 will follow Liberal Studies. All new transfer students beginning Summer 2019 and after will follow Liberal Studies. We anticipate that transfer students will begin to enter under Rock Studies during the Summer/Fall term of 2021.

## Majors

- Art, Bachelor of Arts (BA) (p. 789)
- Art, Bachelor of Fine Arts (BFA) (p. 792)
- Art, Bachelor of Fine Arts (BFA) - Concentration in Ceramic Arts (p. 795)
- Art, Bachelor of Fine Arts (BFA) - Concentration in Digital Media (p. 798)
- Art, Bachelor of Fine Arts (BFA) - Concentration in Drawing (p. 801)
- Art, Bachelor of Fine Arts (BFA) - Concentration in Fiber Arts (p. 803)
- Art, Bachelor of Fine Arts (BFA) - Concentration in Graphic Design (p. 806)
- Art, Bachelor of Fine Arts (BFA) - Concentration in K-12 Art Teacher Preparation (p. 809)
- Art, Bachelor of Fine Arts (BFA) - Concentration in Metalsmithing (p. 814)
- Art, Bachelor of Fine Arts (BFA) - Concentration in Painting (p. 817)
- Art, Bachelor of Fine Arts (BFA) - Concentration in Photography (p. 820)
- Art, Bachelor of Fine Arts (BFA) - Concentration in Printmaking (p. 823)
- Art, Bachelor of Fine Arts (BFA) - Concentration in Psychology (p. 826)
- Art, Bachelor of Fine Arts (BFA) - Concentration in Sculpture (p. 829)

## Minors

- Art - Graphic Design for Communications Majors, Minor (p. 787)
- Art for Elementary Education Majors, Minor (p. 787)
- Art History, Minor (p. 788)
- Art, Minor (p. 832)
- Nonprofit Management in Art, Minor (p. 835)

## Certificates

- Art: Design, Certificate (p. 833)
- Art: Digital Media, Certificate (p. 833)
- Art: Graphic Design, Certificate (p. 834)
- Art: Photography, Certificate (p. 835)

## Courses

### ART 100 - 2-D Design

An introductory studio course examining the underlying structure of basic design in two-dimensional art. Students will be involved in the actual production of two-dimensional design solutions. The history of design is explored, as well as the various techniques employed by artists to express personal visions, communicate ideas or examine and interpret the human experience.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment is limited to students with a program in Art Graphic Design(Comm Major), Art, Art or Art With Certification (K-12).

### ART 101 - 3-D Design

An introductory studio course examining the underlying structure of basic design in three-dimensional art. Students will be involved in the actual production of three-dimensional design solutions. The history of design is explored, as well as the various techniques employed by artists to express personal visions, communicate ideas or examine and interpret the human experience.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment is limited to students with a major in Art, Art or Art With Certification (K-12).

### ART 105 - Basic Studio Drawing

This course will provide students with introductory level drawing knowledge and skills, emphasizing fine art approaches. Drawing will be explored through production, critique, history and aesthetics. Students will be provided with the fundamental technical, historical and conceptual information necessary to produce fine art drawings and maintain a portfolio. The elements and principles of design will be incorporated through the use of various drawing materials and techniques. Emphasis will be placed on the hands-on exploration of formal, technical and conceptual relationships. Students will develop a sensitive response to subtleties in drawing as well as to the whole. Critical thinking will be addressed with each project, allowing students to improve their ability to analyze visual works of art. Through creative studio practice, students discover relationships relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

### ART 106 - Basic Studio Painting

This course will provide students with introductory level painting knowledge and skills, emphasizing fine art approaches. Painting will be explored through production, critique, history and aesthetics in order to achieve individual artistic goals. Students will be provided with the fundamental technical, historical and conceptual information necessary to produce fine art paintings and develop a portfolio. The elements and principles of design will be incorporated through the use of various painting materials and techniques. Emphasis will be placed on the hands-on exploration of formal, technical and conceptual relationships. Students will develop a sensitive response to subtleties in paintings as well as to the whole. Critical thinking will be addressed with each project, allowing students to improve their ability to analyze visual works of art. Through creative studio practice, students discover relationships relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 107 - Basic Studio Photography**

This course will provide students with introductory level photographic knowledge and skills, emphasizing fine art approaches. Photography will be explored through production, critique, history and aesthetics in order to achieve individual artistic goals. Students will be provided with the fundamental technical, historical and conceptual information necessary to produce fine art prints and maintain a portfolio. The elements and principles of design will be incorporated into the study of photography, with focus on formal, technical and conceptual relationships. Students will gain knowledge of various genres of photography, styles, tips and techniques. Critical thinking will be addressed with each project, allowing students to improve their ability to visually analyze artwork. Through creative studio practice, students discover relationships relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 108 - Basic Studio Printmaking**

This course will provide students with introductory level printmaking knowledge and skills. Printmaking will be explored through production, critique, history and aesthetics. Students will be provided with the fundamental, technical, historical and conceptual information necessary to produce fine art prints and editions of prints. The elements and principles of design will be incorporated through the use of various printmaking material and techniques. Emphasis will be placed on the hands-on exploration of formal, technical and conceptual relationships. Critical thinking will be addressed with each project, allowing students to improve their ability to analyze visual works of art. Through creative studio practice, students discover relationships relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 109 - Basic Studio Metalsmithing**

This course will provide students with introductory Metalsmithing knowledge and skills, emphasizing fine art approaches while utilizing a variety of materials, predominantly metal. Metalsmithing will be explored through production, critique, history and aesthetics in order to achieve individual artistic goals and expression. Students will be provided with the fundamental technical, historical and conceptual information necessary to produce fine art forms and develop a portfolio. Students gain an understanding of various techniques, styles and approaches to metalsmithing. Critical thinking will be addressed with each project, allowing students to improve their ability to analyze visual works of art. Through creative studio practice, students discover relationships relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 110 - Basic Studio Sculpture**

This course will provide students with introductory Sculpture knowledge and skills, emphasizing fine art approaches while utilizing a variety of materials. Sculpture will be explored through production, critique, history and aesthetics in order to achieve individual artistic goals and expression. Students will be provided with the fundamental technical, historical and conceptual information necessary to produce fine art forms and develop a portfolio. Students gain an understanding of various techniques, styles and approaches to contemporary sculpture. Critical thinking will be addressed with each project, allowing students to improve their ability to analyze visual works of art. Through creative studio practice, students discover relationship relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 111 - Basic Studio Fiber Art**

This course will provide students with introductory level Fiber Art knowledge and skills. Fiber Art will be explored through production, critique, history and aesthetics. Students will be provided with the fundamental technical, historical and conceptual information necessary to produce fine art forms and develop a portfolio. Through two- and three-dimensional projects, students will have an opportunity to creatively explore a variety of traditional and non-traditional flexible materials, techniques and concepts while developing a portfolio. Emphasis will be placed upon the ability to investigate the unique qualities and characteristics of materials and the development of an original response to an assignment. Critical thinking will be addressed with each project, allowing students to improve their ability to analyze visual works of art. Through creative studio practice, students discover relationships relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 112 - Basic Studio Ceramics**

This course will provide students with introductory ceramics knowledge and skills, emphasizing fine art approaches while utilizing a variety of materials. Ceramics will be explored through production, critique, history and aesthetics in order to achieve individual artistic goals, and expression. Students will be provided with the fundamental technical, historical and conceptual information necessary to produce fine art forms and develop a portfolio. Students gain an understanding of various techniques, styles and approaches to contemporary ceramics. Emphasis will be placed upon the ability to investigate the unique qualities and characteristics of materials and the development of an original response to an assignment. Critical thinking will be addressed with each project, allowing students to improve their ability to analyze visual works of art. Through creative studio practice, students discover relationships relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 113 - Basic Studio Graphic Design**

Students will explore Graphic Design with a beginning level of production, critique, history and aesthetics. This course is intended to develop the student's skill level and personal aesthetic. Creative responses to assignments will include the application of visual language skills to communicate ideas, meaning and information. Coursework will include traditional, digital and mixed media. It will also focus on studies in perception, visual organization, the graphic design process and ideation, with investigations into experimental and expressive aspects of graphic design. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 114 - Basic Studio Digital Media**

This course will provide students with introductory level Digital Media knowledge and skills, emphasizing fine art approaches that utilize the computer in addition to other various technologies to produce works of art. Digital Media will be explored through production, critique, history and aesthetics in order to achieve individual artistic goals. Students will be provided with the fundamental technical, historical and conceptual information necessary to produce digitally-based art. Technical ability and development, conceptual development, and media experimentation will be stressed. Critical thinking will be addressed with each project, allowing students to improve their ability to analyze visual works of art. Through creative studio practice, students discover relationships relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 115 - Visual Literacy**

A cornerstone course involving the study of visual forms of communication with an emphasis on image-based media (newspaper, magazine, film, television, photography, informational graphics, interactive multimedia, digital games and web-based technologies). Topics include visual interpretation, visual manipulation, visual conventions, the role of visual media in cultural processes and aesthetic appreciation.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Thematic Thread(s): Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 121 - Introduction to Visual Arts**

This course provides an introduction to visual arts for high school students enrolled in SRU's Summer Arts Academy.

Credits: 1

Term(s) Typically Offered: Offered as Needed



**ART 130 - Visual Art Inquiry**

Art 130 Visual Art Inquiry: This course presents an approachable yet broad, sweeping overview of the visual arts while also providing an introduction to modes of inquiry shared by all the creative and aesthetic disciplines. Students will explore and analyze influential works of art through the lens of materials, styles, and processes as a way to gain an understanding of the arts as a method of communication and expression. From ancient to contemporary art history we examine artwork in the context of social, religious, historical, cultural influences in which they existed, and will draw connections between artistic movements and how they are common to all fine and performing arts. Through building a context for understanding, art is made meaningful to the student's experience. Studying and experiencing the arts, including dance, music, theatre, and the visual arts, develops creative and aesthetic abilities. The arts introduce students not only to artists and their creations, but also to history, cultures, values, technique, imagination, creativity, and issues relevant to society. Students will gain an understanding of the creative process and how to analyze and interpret message and meaning in works of art. While the arts can bring us pleasure, they can also serve to enlighten and illuminate critical issues, lead to personal discoveries, and foster innovation in all fields. Students will learn to think critically about the arts, develop an appreciation for artistic creations, and by viewing live performances and exhibitions, become engaged audience members. Arts inquiry courses use and develop the analytic and interpretive modes of inquiry needed to understand and explore both tangible and abstract artistic works and the cultures in which they exist. In arts inquiry courses, students confront a variety of cultural and artistic expressions in order to gain an understanding of the human condition, and ultimately express their relationship to artistic work, meaning, and the creative process. Attendance at arts events will be required during this course and may require a fee.

Credits: 3

Thematic Thread(s): Transfer Thread Completion Course  
Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**ART 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed  
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.  
Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**ART 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ART 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**ART 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ART 200 - Activities and Fundamentals**

A course providing for the study of child development through creative activities. It includes theory, experimentation with two and three-dimensional processes appropriate to the elementary classroom, methods of motivation, evaluation and classroom management.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**ART 205 - Intermediate Studio Drawing**

The student will explore Drawing with an increased level of production, critique, history and aesthetics. This course will provide the student with a moderate level of fine art studio drawing. Students will explore how to work with the fine art medium of mark-making through process and production, including art history and discussion. Students will review fundamental technical and conceptual information necessary to further the creation of fine art pieces. Students will develop individual applications of drawing with an increased level to critically analyze both individual and peer artwork. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problem; ability to synthesize. Repeatable: consult individual curriculum guide.

Prerequisites: ART 100<sup>D</sup> or ART 101<sup>D</sup> or ART 105<sup>D</sup> or ART 106<sup>D</sup> or ART 107<sup>D</sup> or ART 108<sup>D</sup> or ART 109<sup>D</sup> or ART 110<sup>D</sup> or ART 111<sup>D</sup> or ART 112<sup>D</sup> or ART 114<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer  
Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 206 - Intermediate Studio Painting**

The student will explore Painting with an increased level of production, critique, history and aesthetics. This course will provide the student with a moderate level of fine art studio painting. Students will explore how to work with the fine art medium of paint through process and production, including art history and discussion. Students will review fundamental technical and conceptual information necessary to further the creation of fine art pieces. Students will develop individual applications of painting with an increased level to critically analyze both individual and peer artwork. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize. Repeatable: consult individual curriculum guide.

Prerequisites: ART 100<sup>D</sup> or ART 101<sup>D</sup> or ART 105<sup>D</sup> or ART 106<sup>D</sup> or ART 107<sup>D</sup> or ART 108<sup>D</sup> or ART 109<sup>D</sup> or ART 110<sup>D</sup> or ART 111<sup>D</sup> or ART 112<sup>D</sup> or ART 114<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 207 - Intermediate Studio Photography**

The student will explore Photography with an increased level of production, critique, history and aesthetics. Student will continue to develop photographic knowledge and skills, emphasizing fine art approaches. Students will review fundamental technical and conceptual information necessary to further the creation of fine art photographs. Students will continue to receive technical, historical and conceptual information to help advance their portfolios. Primary emphasis will be placed on technical refinement alongside development of creative problem-solving skills. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize. Repeatable: consult individual curriculum guide.

Prerequisites: ART 100<sup>D</sup> or ART 101<sup>D</sup> or ART 105<sup>D</sup> or ART 106<sup>D</sup> or ART 107<sup>D</sup> or ART 108<sup>D</sup> or ART 109<sup>D</sup> or ART 110<sup>D</sup> or ART 111<sup>D</sup> or ART 112<sup>D</sup> or ART 114<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 208 - Intermediate Studio Printmaking**

The student will explore Printmaking with an increased level of production, critique, history and aesthetics. This course will provide students with opportunities to explore and develop techniques and concepts of Printmaking. Emphasis will be on the manual procedures of printing black and white as well as color prints. Continued development of technical ability, conceptual development and media experimentation will be stressed. Primary emphasis will be placed on the development of creative problem-solving skills. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize. Repeatable: consult individual curriculum guide.

Prerequisites: ART 100<sup>D</sup> or ART 101<sup>D</sup> or ART 105<sup>D</sup> or ART 106<sup>D</sup> or ART 107<sup>D</sup> or ART 108<sup>D</sup> or ART 109<sup>D</sup> or ART 110<sup>D</sup> or ART 111<sup>D</sup> or ART 112<sup>D</sup> or ART 114<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 209 - Intermediate Studio Metalsmithing**

The student will explore Metalsmithing with an increased level of production, critique, history and aesthetics. This course is intended to increase skill level while continuing to develop the student's personal aesthetic. Students will demonstrate a variety of metalsmithing techniques while understanding Metalsmithing's technical and historical contexts. Students are expected to be self-motivated in terms of idea generation and execution. Students will explore avenues to make their work more personal by combining metalsmithing technical skills with form and concept. Primary emphasis will be placed on technical refinement alongside development of creative problem-solving skills. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize. Repeatable: consult individual curriculum guide.

Prerequisites: ART 100<sup>D</sup> or ART 101<sup>D</sup> or ART 105<sup>D</sup> or ART 106<sup>D</sup> or ART 107<sup>D</sup> or ART 108<sup>D</sup> or ART 109<sup>D</sup> or ART 110<sup>D</sup> or ART 111<sup>D</sup> or ART 112<sup>D</sup> or ART 114<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 210 - Intermediate Studio Sculpture**

The student will explore Sculpture with an increased level of production, critique, history and aesthetics. This course is intended to increase skill level while continuing to develop the student's personal aesthetic. Students will demonstrate a variety of sculptural techniques while understanding Sculpture's contemporary and historical contexts. Students are expected to be self-motivated in terms of idea generation and execution. Students will explore avenues to make their work more personal by combining technical skills with form and concept. primary emphasis will be placed on technical refinement alongside development of creative problem-solving skills. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize. Repeatable: consult individual curriculum guide

Prerequisites: ART 100<sup>D</sup> or ART 101<sup>D</sup> or ART 105<sup>D</sup> or ART 106<sup>D</sup> or ART 107<sup>D</sup> or ART 108<sup>D</sup> or ART 109<sup>D</sup> or ART 110<sup>D</sup> or ART 111<sup>D</sup> or ART 112<sup>D</sup> or ART 114<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 211 - Intermediate Studio Fiber Art**

The student will continue to explore Fiber Art with an increased level of production, critique, history and aesthetics This course will provide students with opportunities to explore both traditional and non-traditional flexible materials, techniques and concepts within contemporary Fiber Art. Through two- and three-dimensional projects, students will continue to develop their skills, artistic perception and conceptual thinking. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize. Repeatable: consult individual curriculum guide.

Prerequisites: ART 100<sup>D</sup> or ART 101<sup>D</sup> or ART 105<sup>D</sup> or ART 106<sup>D</sup> or ART 107<sup>D</sup> or ART 108<sup>D</sup> or ART 109<sup>D</sup> or ART 110<sup>D</sup> or ART 111<sup>D</sup> or ART 112<sup>D</sup> or ART 114<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 212 - Intermediate Studio Ceramics**

The student will explore Ceramics with an increased level of production, critique, history and aesthetics. Students will explore avenues to make their work more personal by combining Ceramic technical skills with form and concept. Primary emphasis will be placed on technical refinement of wheel-throwing and hand-building construction alongside development of creative problem-solving skills. Various methods of glazing and firing are addressed as they relate to student work on specific projects. Technical refinement alongside development of creative problem-solving skills will be emphasized also. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize. Repeatable: consult individual curriculum guide.

Prerequisites: ART 100<sup>D</sup> or ART 101<sup>D</sup> or ART 105<sup>D</sup> or ART 106<sup>D</sup> or ART 107<sup>D</sup> or ART 108<sup>D</sup> or ART 109<sup>D</sup> or ART 110<sup>D</sup> or ART 111<sup>D</sup> or ART 112<sup>D</sup> or ART 114<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 213 - Intermediate Studio Graphic Design**

The student will explore Graphic Design with an increased level of production, critique, history and aesthetics. This course is intended to increase skill level while continuing to develop the student's personal aesthetic. Creative responses to assignments will include the application of visual language skills to communicate ideas, meaning and information. Coursework will include traditional, digital and mixed media. Coursework will focus on studies in perception, visual organization, the graphic design process and ideation, with investigations into experimental and expressive aspects of graphic design. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize. Repeatable: consult individual curriculum guide.

Prerequisites: ART 100<sup>D</sup> or ART 101<sup>D</sup> or ART 105<sup>D</sup> or ART 106<sup>D</sup> or ART 107<sup>D</sup> or ART 108<sup>D</sup> or ART 109<sup>D</sup> or ART 110<sup>D</sup> or ART 111<sup>D</sup> or ART 112<sup>D</sup> or ART 114<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 214 - Intermediate Studio Digital Media**

The student will explore Digital media with an increased level of production, critique, history and aesthetics in order to achieve individual artistic goals. Emphasis will be placed upon production and process. Students will review fundamental technical and conceptual information necessary to further the creation of fine art pieces while maintaining a portfolio. New digital techniques will be explored as they become necessary to articulate and advance individual creative needs. Primary emphasis will be placed on technical refinement alongside development of creative problem-solving skills. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize. Repeatable: consult individual guide.

Prerequisites: ART 100<sup>D</sup> or ART 101<sup>D</sup> or ART 105<sup>D</sup> or ART 106<sup>D</sup> or ART 107<sup>D</sup> or ART 108<sup>D</sup> or ART 109<sup>D</sup> or ART 110<sup>D</sup> or ART 111<sup>D</sup> or ART 112<sup>D</sup> or ART 114<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 225 - Overview of Western Art**

A sweeping survey intended to acquaint the student with the stylistic development and chronology of the western tradition in the arts. Covers the period and styles prevalent in the Western World from the Beginnings of art to the modern era.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

**ART 226 - Overview of World Art**

A survey course intended to acquaint the student with the stylistic developments and chronology of the visual arts in Asia, Africa, India and South America. Special emphasis will be given to the expression of cultural, religious and aesthetic purposes of art works created outside the western tradition.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

**ART 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ART 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**ART 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ART 300 - Art Seminar**

A seminar for advanced art studio majors, designed to sharpen the students' critical and evaluation skills.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ART PORTFOLIO APPROVED attribute.

**ART 305 - Advanced Studio Drawing**

This course will investigate an advanced level of drawing production, critique, history and aesthetics, and will focus on the achievement of individual artistic goals through the exploration of concept-based assignments. A wide range of traditional and non-traditional materials and processes will be utilized to further the skillful creation of artwork, and new drawing techniques will be explored to aid in the articulation of individual creative ideas. Emphasis will be placed upon making judgments and developing fluency through heightened production and an expanded exploration of process. Additionally, students will strengthen their ability to critically analyze artwork, and will maintain a drawing portfolio. CAPP Prerequisites: Must take 1 of the following: ART 205, ART 206, ART 207, ART 208, ART 209, ART 210, ART 211, ART 212, ART 213 or ART 214.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 306 - Advanced Studio Painting**

This course will investigate an advanced level of painting production, critique, history and aesthetics, and will focus on the achievement of individual artistic goals through the exploration of concept-based assignments. A wide range of traditional and non-traditional materials and processes will be utilized to further the skillful creation of artwork, and new drawing techniques will be explored to aid in the articulation of individual creative ideas. Emphasis will be placed upon making judgments and developing fluency through heightened production and an expanded exploration of process. Additionally, students will strengthen their ability to critically analyze artwork, and will maintain a painting portfolio. CAPP Prerequisites: Must take 1 of the following: ART 205, ART 206, ART 207, ART 208, ART 209, ART 210, ART 211, ART 212, ART 213 or ART 214.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 307 - Advanced Studio Photography**

This course will investigate an advanced level of photographic production, critique, history and aesthetics. Students will continue to investigate genres of photography, and new photographic techniques will be explored to aid in the articulation of individual artistic goals. Emphasis will be placed upon strengthening portfolios through heightened production and an expanded exploration of process. Students will continue to strengthen their ability to critically analyze artwork. Through creative studio practice, students should develop the following emphasized artistic traits: independence in making judgments and fluency in ideas and materials. Repeatable: consult individual curriculum guide.

Prerequisites: ART 205<sup>D</sup> or ART 206<sup>D</sup> or ART 207<sup>D</sup> or ART 208<sup>D</sup> or ART 209<sup>D</sup> or ART 210<sup>D</sup> or ART 211<sup>D</sup> or ART 212<sup>D</sup> or ART 213<sup>D</sup> or ART 214<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 308 - Advanced Studio Printmaking**

This course will provide students with opportunities to explore techniques and concepts of printmaking at an advanced level. Through projects students will have an opportunity to develop their skills, artistic perception and conceptual thinking. The course will focus on students gaining independence in making judgments, and developing fluency in their art process. Through creative studio practice, students should be able to develop the following emphasized artistic traits: independence in making judgments and fluency in ideas and materials.

Prerequisites: ART 205<sup>D</sup> or ART 206<sup>D</sup> or ART 207<sup>D</sup> or ART 208<sup>D</sup> or ART 209<sup>D</sup> or ART 210<sup>D</sup> or ART 211<sup>D</sup> or ART 212<sup>D</sup> or ART 213<sup>D</sup> or ART 214<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 309 - Advanced Studio Metalsmithing**

This course will investigate an advanced level of metalsmithing production, critique, history and aesthetics. Students will continue to investigate genres of metalsmithing, and new metalsmithing techniques will be explored to aid in the articulation of individual artistic goals. Emphasis will be placed upon strengthening portfolios through heightened production and an expanded exploration of process. Students will continue to strengthen their ability to critically analyze artwork. Through creative studio practice, students should develop the following emphasized artistic traits: independence in making judgments and fluency in ideas and materials. Repeatable: consult individual curriculum guide.

Prerequisites: ART 205<sup>D</sup> or ART 206<sup>D</sup> or ART 207<sup>D</sup> or ART 208<sup>D</sup> or ART 209<sup>D</sup> or ART 210<sup>D</sup> or ART 211<sup>D</sup> or ART 212<sup>D</sup> or ART 213<sup>D</sup> or ART 214<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 310 - Advanced Studio Sculpture**

This course will investigate an advanced level of Sculpture production, critique, history and aesthetics. Students will continue to investigate genres of Sculpture, and new Sculpture techniques will be explored to aid in the articulation of individual artistic goals. Emphasis will be placed upon strengthening portfolios through heightened production and an expanded exploration of process. Students will continue to strengthen their ability to critically analyze artwork. Through creative studio practice, students should develop the following emphasized artistic traits: independence in making judgments and fluency in ideas and materials. Repeatable: consult individual curriculum guide.

Prerequisites: ART 205<sup>D</sup> or ART 206<sup>D</sup> or ART 207<sup>D</sup> or ART 208<sup>D</sup> or ART 209<sup>D</sup> or ART 210<sup>D</sup> or ART 211<sup>D</sup> or ART 212<sup>D</sup> or ART 213<sup>D</sup> or ART 214<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 311 - Advanced Studio Fiber Art**

This course will provide students with opportunities to explore traditional and non-traditional flexible materials, techniques and concepts of contemporary Fiber Art at an advanced level. Through two- and three-dimensional projects students will have an opportunity to develop their skills, artistic perception and conceptual thinking. The course will focus on students gaining independence in making judgments, and developing fluency in their art process. Through creative studio practice, students should be able to develop the following emphasized artistic traits: independence in making judgments and fluency in ideas and materials. Repeatable: consult individual curriculum guide.

Prerequisites: ART 205<sup>D</sup> or ART 206<sup>D</sup> or ART 207<sup>D</sup> or ART 208<sup>D</sup> or ART 209<sup>D</sup> or ART 210<sup>D</sup> or ART 211<sup>D</sup> or ART 212<sup>D</sup> or ART 213<sup>D</sup> or ART 214<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 312 - Advanced Studio Ceramics**

This course will investigate an advanced level of ceramics production, critique, history and aesthetics, and will focus on the achievement of individual artistic goals through the exploration of functional and concept-based assignments. A wide range of traditional and non-traditional materials and processes will be utilized to further the skillful creation of artwork, and new ceramic techniques will be explored to aid in the articulation of individual creative endeavors. Emphasis will be placed on fluency through heightened production and an expanded exploration of process. Students will strengthen their ability to critically analyze artwork, and will maintain a ceramics portfolio. Through creative studio practice, students should develop the following emphasized artistic traits: independence in making judgments and fluency in ideas and materials. Repeatable: consult individual curriculum guide.

Prerequisites: ART 205<sup>D</sup> or ART 206<sup>D</sup> or ART 207<sup>D</sup> or ART 208<sup>D</sup> or ART 209<sup>D</sup> or ART 210<sup>D</sup> or ART 211<sup>D</sup> or ART 212<sup>D</sup> or ART 213<sup>D</sup> or ART 214<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**ART 313 - Advanced Studio Graphic Design**

This course will investigate an advanced level of graphic design production, critique, history and aesthetics, and will focus on the achievement of individual artistic goals through the exploration of concept-based assignments. A wide range of traditional and non-traditional materials and processes will be utilized to further the skillful creation of artwork, and new graphic design techniques will be through heightened production and an expanded exploration of process. Students will strengthen their ability to critically analyze artwork, and will maintain a graphic design portfolio. Through creative studio practice, students would develop the following emphasized artistic traits: independence in making judgments and fluency in ideas and materials. Repeatable: consult individual curriculum guide.

Prerequisites: ART 205<sup>D</sup> or ART 206<sup>D</sup> or ART 207<sup>D</sup> or ART 208<sup>D</sup> or ART 209<sup>D</sup> or ART 210<sup>D</sup> or ART 211<sup>D</sup> or ART 212<sup>D</sup> or ART 213<sup>D</sup> or ART 214<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 314 - Advanced Studio Digital Media**

This course will investigate an advanced level of digital media production, critique, history and aesthetics, and will focus on the achievement of individual artistic goals through the exploration of concept-based assignments. A wide range of traditional and non-traditional materials and processes will be utilized to further the skillful creation of artwork, and new digital media techniques will be explored to aid in the articulation of individual creative endeavors. Emphasis will be placed on fluency through heightened production and an expanded exploration of process. Students will strengthen their ability to critically analyze artwork, and will maintain a digital media portfolio. Through creative studio practice, students should develop the following emphasized artistic traits: independence in making judgments and fluency in ideas and materials. Repeatable: consult individual curriculum guide. CAPP  
 Prerequisites: Must take 1 of the following: ART 205, ART 206, ART 207, ART 208, ART 209, ART 210, ART 211, ART 212, ART 213 or ART 214.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 315 - Master Studio**

A course in which master artists and craftsmen speak to the history and development of their discipline. They will also demonstrate techniques and critique student work. May be repeated for a maximum of 9 credits.

Credits: 1

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 317 - Elementary Art Methods and Materials**

This course provides an exploration of age appropriate instructional methods, materials and techniques for comprehensive elementary art programs. Art education theory, developmental stages of artistic growth, the importance of the arts in the curriculum, issues of inclusion, differentiation of instruction and assessment, PA Standards for the Arts, and strategies to enhance interdisciplinary connections will be included. Opportunity is provided to engage in, and analyze, actual instruction and artistic products. Field placement required.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 325 - North American Art History**

Explores the history of the visual arts produced on the North American continent and covers the artistic expressions of Native Americans and the development of European colonial art to the Second World War. Can be repeated for up to 6 credits.

Prerequisite: ART 225<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 335 - The Renaissance Tradition**

Explores the historical development of the visual arts in Europe from the mid-14th century to the mid-17th century. Can be repeated for up to 6 credits.

Prerequisite: ART 225<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 345 - Foundations of Modern Art**

The development of modern concepts and approaches in the visual arts from the late 18th century up to and including Impressionism in the late 19th century. Can be repeated for up to 6 credits.

Prerequisite: ART 225<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 355 - Early Modern Art**

Explores the history of the visual arts during the late nineteenth century culminating with the surrealist movement before the Second World War. Can be repeated for up to 6 credits.

Prerequisite: ART 225<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 365 - Art Since 1945**

Explores the development of the visual arts in the late twentieth century. It will cover the social, cultural and stylistic movements from Abstract Expressionism to contemporary art. Can be repeated for up to 6 credits.

Prerequisite: ART 225<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 405 - Senior Studio Drawing**

The student will demonstrate intrinsic motivation and a high degree of self-awareness in a personal investigation of drawing production, critique, history and aesthetics, and will demonstrate self-directed behavior relevant to professionalism and artistry. Coursework will require an understanding of self that extends to an integral commitment in the production of drawing. The quality and caliber of drawing work produced in this course will define the student as a drawing artist. CAPP Prerequisites: Must take 1 of the following: ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313 or ART 314

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 406 - Senior Studio Painting**

The student will demonstrate intrinsic motivation and a high degree of self-awareness in a personal investigation of painting production, critique, history and aesthetics, and will demonstrate self-directed behavior relevant to professionalism and artistry. Coursework will require an understanding of self that extends to an integral commitment in the production of painting. The quality and caliber of drawing work produced in this course will define the student as a painter. CAPP Prerequisites: Must take 1 of the following: ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313 or ART 314

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 407 - Senior Studio Photography**

This course will encourage students to explore personal investigations of photographic production, critique, history and aesthetics. Students will demonstrate self-directed behavior relevant to professionalism and artistry. The course requires students to build a cohesive body of work with an integral emphasis on the photographic image, allowing students to supplement their technical and conceptual aptitude while developing a greater understanding of their placement in a larger historical context. Coursework will emphasize a high level of quantity, caliber and ambition to further articulate a professional portfolio. Through creative studio practice, students should develop a high degree of self-awareness and intrinsic motivation. Repeatable: consult individual curriculum guide. CAPP Prerequisites: Must take 1 of the following: ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313 or ART 314.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 408 - Senior Studio Printmaking**

The quality and caliber of prints produced in this course will define the student as an artist. Emphasis will be placed on artistic perception, developing concepts and individual artistic vision. Students will focus on a personal investigation of printmaking, technique, critique, history and aesthetics, and will demonstrate self-directed behavior relevant to professionalism and artistry. Through creative studio practice, students should develop a high degree of self-awareness and intrinsic motivation.

CAPP Prerequisites: Must take 1 of the following: ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313 or ART 314.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 409 - Senior Studio Metalsmithing**

This course will encourage students to explore a personal investigation of metalsmithing production, critique, history and aesthetics. Students will demonstrate self-directed behavior relevant to professionalism and artistry. Coursework will require an understanding of self that extends to an integral commitment in the production of a variety of work that is representative of the student's individual aesthetic. The quality and caliber of work produced in this course will define the student as a metalsmith. Through creative studio practice, students should develop a high degree of self awareness and intrinsic motivation. Repeatable: consult individual curriculum guide. CAPP Prerequisites: Must take 1 of the following: ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313 or ART 314.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 410 - Senior Studio Sculpture**

This course will encourage students to explore a personal investigation of Sculpture through production, critique, history and aesthetics. Students will demonstrate self-directed behavior relevant to professionalism and artistry. Coursework will require an understanding of self that extends to an integral commitment in the production of a variety of work that is representative of the student's individual aesthetic. The quality and caliber of work produced in this course will define the student as a sculptor. Through creative studio practice, students should develop a high degree of self-awareness and intrinsic motivation. Repeatable: consult individual curriculum guide. CAPP Prerequisites: Must take 1 of the following: ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313 or ART 314.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 411 - Senior Studio Fiber Art**

The quality and caliber of fiber artwork produced in this course will define the student as an artist. Emphasis will be placed on artistic perception, developing concepts and individual artistic vision. Students will focus on a personal investigation of fiber art materials, technique, critique, history and aesthetics, and will demonstrate self-directed behavior relevant to professionalism and artistry. Through creative studio practice, students should develop a high degree of self-awareness and intrinsic motivation. Repeatable: consult individual curriculum guide.

Prerequisites: ART 305<sup>D</sup> or ART 306<sup>D</sup> or ART 307<sup>D</sup> or ART 308<sup>D</sup> or ART 309<sup>D</sup> or ART 310<sup>D</sup> or ART 311<sup>D</sup> or ART 312<sup>D</sup> or ART 313<sup>D</sup> or ART 314<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 412 - Senior Studio Ceramics**

This course will encourage students to explore a personal investigation of ceramics production, critique, history and aesthetics. Students will demonstrate self-directed behavior relevant to professionalism and artistry. Coursework will require an understanding of self that extends to an integral commitment in the production of ceramics. The quality and caliber of ceramic work produced in this course will define the student as a ceramic artist. Through creative studio practice, students should develop a high degree of self-awareness and intrinsic motivation. Repeatable: consult individual curriculum guide. CAPP Prerequisites: Must take 1 of the following: ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313 or ART 314.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 413 - Senior Studio Graphic Design**

This course will encourage students to explore a personal investigation of graphic design production, critique, history and aesthetics. Students will demonstrate self-directed behavior relevant to professionalism and artistry. Coursework will require an understanding of self that extends to an integral commitment in the production of graphic design. The quality and caliber of graphic design work produced in this course will define the student as a graphic artist. Through creative studio practice, students should develop a high degree of self-awareness and intrinsic motivation. Repeatable: consult individual curriculum guide.

Prerequisites: ART 305<sup>D</sup> or ART 306<sup>D</sup> or ART 307<sup>D</sup> or ART 308<sup>D</sup> or ART 309<sup>D</sup> or ART 310<sup>D</sup> or ART 311<sup>D</sup> or ART 312<sup>D</sup> or ART 313<sup>D</sup> or ART 314<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 414 - Senior Studio Digital Media**

This course will encourage students to explore a personal investigation of digital media production, critique, history and aesthetics. Students will demonstrate self-directed behavior relevant to professionalism and artistry. Coursework will require an understanding of self that extends to an integral commitment in the production of digital media. The quality and caliber of digital media work produced in this course will define the student as a digital artist. Through creative studio practice, students should develop a high degree of self-awareness and intrinsic motivation. Repeatable: consult individual curriculum guide. CAPP Prerequisites: Must take 1 of the following: ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313 or ART 314.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 420 - Art History Seminar**

A seminar for students qualified to do independent study and research in art history. Topics selected through consultation with the instructor. Can be repeated for up to 6 credits.

Prerequisite: ART 225<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 425 - Senior Project Drawing**

A capstone course emphasizing the articulation of ideas and presentation. This course provides independent study in drawing, culminating in a public exhibition demonstrating the student's artistic direction. The student will focus on concepts relevant to individual interests, and will determine the content and form based on past study of drawing production, critique, history and aesthetics. The student is responsible for all necessary components of a professional exhibition of their drawing work. Permission of the instructor.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 426 - Senior Project Painting**

This course provides independent study in painting, culminating in a public exhibition demonstrating the student's artistic direction. The student will focus on concepts relevant to individual interests, and will determine the content and form based on past study of painting production, critique, history and aesthetics. The student is responsible for all necessary components of a professional exhibition of their graphic design work. Permission of the instructor.

Prerequisites: ART 306<sup>D</sup> or ART 406<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 427 - Senior Project Photography**

A capstone course emphasizing the articulation of ideas and presentation. Senior students will engage in an individually proposed project, culminating in a public exhibition with supporting materials that demonstrate the student's artistic expertise. The student will focus on an individual direction in Photography, the content and form of which will be determined by past photographic investigations, critique, history and aesthetics while working closely with the Photography professor. The student is responsible for all components of their projects while displaying a high level of self-awareness, intrinsic motivation, and professionalism. By permission of instructor.

Prerequisites: ART 307<sup>D</sup> or ART 407<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 428 - Senior Project Printmaking**

In this capstone course the senior student will engage in an individually proposed project, culminating in a public exhibition demonstrating the student's artistic direction. The student will focus on concepts relevant to individual interests in printmaking, and will determine the content and form based on past study of printmaking production creation, critique, history and aesthetics, and under the supervision of the Fiber Art Professor. The student is responsible for all necessary components of a professional exhibition of their work. By permission of the instructor.

Prerequisites: ART 308<sup>D</sup> or ART 408<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 429 - Senior Project Metalsmithing**

A capstone course emphasizing the articulation of ideas and presentation. Senior students will engage in an individually proposed project, culminating in a public exhibition with supporting materials that demonstrate the student's artistic expertise. The student will focus on an individual direction in Metalsmithing, the content and form of which will be determined by past studio investigations, critique, history and aesthetics while working closely with the Metalsmithing professor. The student is responsible for all components of their projects while displaying a high level of self-awareness, intrinsic motivation, and professionalism. By permission of instructor.

Prerequisites: ART 309<sup>D</sup> or ART 409<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 430 - Senior Project Sculpture**

A capstone course emphasizing the articulation of ideas and presentation. Senior students will engage in an individually proposed project, culminating in a public exhibition with supporting materials that demonstrate the student's artistic expertise. The student will focus on an individual direction in Sculpture, the content and form of which will be determined by past studio investigations, critique, history and aesthetics while working closely with the Sculpture professor. The student is responsible for all components of their projects while displaying a high level of self-awareness, intrinsic motivation, and professionalism. By permission of instructor.

Prerequisites: ART 310<sup>D</sup> or ART 410<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 431 - Senior Project Fiber Art**

In this capstone course the senior student will engage in an individually proposed project, culminating in a public exhibition demonstrating the student's artistic direction. The student will focus on concepts relevant to individual interests in fiber art, and will determine the content and form based on past study of fiber art production creation, critique, history and aesthetics, and under the supervision of the Fiber Art Professor. The student is responsible for all necessary components of a professional exhibition of their work. By permission of the instructor.

Prerequisites: ART 311<sup>D</sup> or ART 411<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 432 - Senior Project Ceramics**

A capstone course emphasizing the articulation of ideas and presentation. Senior students will engage in an individually proposed project, culminating in a public exhibition with supporting materials that demonstrate the student's artistic expertise. The student will focus on an individual direction in ceramics, the content and form of which will be determined by past ceramics investigations, critique, history and aesthetics while working closely with the ceramics professor. The student is responsible for all components of their projects while displaying a high level of self-awareness, intrinsic motivation, and professionalism. By permission of instructor.

Prerequisites: ART 312<sup>D</sup> or ART 412<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 433 - Senior Project Graphic Design**

A capstone course emphasizing the articulation of ideas and presentation. Senior students will engage in an individually proposed project, culminating in a public exhibition with supporting materials that demonstrate the student's artistic expertise. The student will focus on an individual direction in Graphic Design, the content and form of which will be determined by past Graphic Design professor. The student is responsible for all components of their projects while displaying a high level of self-awareness, intrinsic motivation, and professionalism. By permission of instructor.

Prerequisites: ART 313<sup>D</sup> or ART 413<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 434 - Senior Project Digital Media**

A capstone course emphasizing the articulation of ideas and presentation. Senior students will engage in an individually proposed project, culminating in a public exhibition with supporting materials that demonstrate the student's artistic expertise. The student will focus on an individual direction in Digital Media, the content and form of which will be determined by past digital media investigations, critique, history and aesthetics while working closely with the Digital Media professor. The student is responsible for all components of their projects while displaying a high level of self-awareness, intrinsic motivation, and professionalism. By permission of instructor.

Prerequisites: ART 314<sup>D</sup> or ART 414<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 440 - Art Education Methods**

This class meets once a week to discuss field placement experiences and teaching skills and fulfills part of the Pennsylvania Department of Education (PDE) Stage 3 Pre-Student Teaching Practical requirements. Activities include discussions on research, development and preparation of art lesson plans, strategies for success in an inclusive art classroom, and analysis and assessment of teaching experiences.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms Odd

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

Enrollment is limited to students with a program in Art.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 450 - Internship**

Professional experiences geared to student vocational goals. Working in galleries, museums or graphic design studios, working with professional artists in their studios and other job-related experiences.

Corequisite(s): ART 451

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**ART 451 - Art Education Methods Internship**

This internship covers some of the Stage 3 Pre-Student Teaching field experiences: 90 hours of documented placement under the supervision and mentorship of certified K-12 Art Teacher(s). At least one experience during Stage 3 must include students with special needs in inclusive settings. Activities include assisting small or large groups of children, lesson development/preparation, and lesson plans. Observation and evaluation of teaching by the professor will occur near the end of the semester.

Corequisite(s): ART 440

Credits: 2

Term(s) Typically Offered: Offered Fall Terms Odd

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

Enrollment is limited to students with a program in Art.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 475 - Extended Studio Drawing**

This course provides individualized creative work in drawing that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 476 - Extended Studio Painting**

This course provides individualized creative work in Painting that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 477 - Extended Studio Photography**

This course provides individualized creative work in Photography that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 478 - Extended Studio Printmaking**

This course provides individualized creative work in Printmaking that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 479 - Extended Studio Metalsmithing**

This course provides individualized creative work in Metalsmithing that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 480 - Extended Studio Sculpture**

This course provides individualized creative work in Sculpture that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 481 - Extended Studio Fiber Art**

This course provides individualized creative work in Fiber Art that focuses on a specific concept process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 482 - Extended Studio Ceramics**

This course provides individualized creative work in Ceramics that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 483 - Extended Studio Graphic Design**

This course provides individualized creative work in Graphic Design that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 484 - Extended Studio Digital Media**

This course provides individualized creative work in Digital Media that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 490 - Independent Study**

Offers the opportunities of advanced creative activity in a single area of concentration (painting, graphics, ceramics, art history, etc.) to be chosen by the student with the consent of the department. Prerequisites: Junior or senior standing, completion of lower level course offerings in chosen area of concentration, acceptance of project proposal by the department and permission of the instructor, departmental chairperson and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Art - Graphic Design for Communications Majors, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

### Related Links

Art - Graphic Design for Communication Majors, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/art-graphic-design-minor/>)

Art Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/art/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

### Curriculum Guide

#### GPA Requirement

Minor GPA: 2.00 or higher

#### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU

- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Basic Studio Courses</b>		
ART 100	2-D Design	3
ART 107	Basic Studio Photography	3
ART 114	Basic Studio Digital Media	3
<b>Art Synthesis Course</b>		
ART 205	Intermediate Studio Drawing	3
<b>Advanced Studio Courses</b>		
ART 313	Advanced Studio Graphic Design	3
ART 314	Advanced Studio Digital Media	3
<b>Senior Studio Course</b>		
Select one of the following:		3
ART 405	Senior Studio Drawing	
ART 406	Senior Studio Painting	
ART 407	Senior Studio Photography	
ART 408	Senior Studio Printmaking	
ART 413	Senior Studio Graphic Design	
ART 414	Senior Studio Digital Media	
<b>Total Hours</b>		<b>21</b>

- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN ART GRAPHIC DESIGN (04D)

For Communication Major(s)

This program is effective as of Fall 2003

Revision date: 07-2019

## Art for Elementary Education Majors, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

### Related Links

Art for Elementary Education Majors, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/art-early-childhood-education-minor/>)

Art Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/art/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.00 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Basic Studio Required Course</b>		
ART 105	Basic Studio Drawing	3
<b>Basic 2D Studio Courses</b>		
Select one of the following:		3
ART 106	Basic Studio Painting	
ART 107	Basic Studio Photography	
ART 108	Basic Studio Printmaking	
ART 114	Basic Studio Digital Media	
<b>Basic 3D Studio Courses</b>		
Select one of the following:		3
ART 109	Basic Studio Metalsmithing	
ART 110	Basic Studio Sculpture	
ART 111	Basic Studio Fiber Art	
ART 112	Basic Studio Ceramics	
<b>Art History Course</b>		
ART 225	Overview of Western Art	3
<b>Art Synthesis Course</b>		
Select one of the following:		3
ART 205	Intermediate Studio Drawing	
ART 206	Intermediate Studio Painting	
ART 207	Intermediate Studio Photography	
ART 208	Intermediate Studio Printmaking	
ART 209	Intermediate Studio Metalsmithing	
ART 210	Intermediate Studio Sculpture	
ART 211	Intermediate Studio Fiber Art	
ART 212	Intermediate Studio Ceramics	
ART 213	Intermediate Studio Graphic Design	
ART 214	Intermediate Studio Digital Media	
<b>Advanced Studio Courses</b>		
Select one of the following:		3
ART 305	Advanced Studio Drawing	
ART 306	Advanced Studio Painting	
ART 307	Advanced Studio Photography	
ART 308	Advanced Studio Printmaking	
ART 309	Advanced Studio Metalsmithing	
ART 310	Advanced Studio Sculpture	

ART 311	Advanced Studio Fiber Art	
ART 312	Advanced Studio Ceramics	
ART 313	Advanced Studio Graphic Design	
ART 314	Advanced Studio Digital Media	
<b>Advanced Topics in Elementary Art</b>		
ART 317	Elementary Art Methods and Materials	3
<b>Total Hours</b>		<b>21</b>

- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN ART FOR EARLY CHILDHOOD MAJORS (04C)

This program is effective as of Fall 2007.

Revision date: 8-2019

## Art History, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

### Related Links

Art History, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/art-history-minor/>)

Art Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/art/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.00 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Art Courses</b>		
ART 225	Overview of Western Art	3
ART 226	Overview of World Art	3
<b>Electives</b>		

Select four of the following:

12

ART 325	North American Art History
ART 335	The Renaissance Tradition
ART 345	Foundations of Modern Art
ART 355	Early Modern Art
ART 365	Art Since 1945
ART 420	Art History Seminar

**Total Hours****18**

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN ART HISTORY (04B)

This program is effective as of Spring 2004

Revision date: 8-2019

# Art, Bachelor of Arts (BA)

## Program Learning Outcomes

- **Critical Thinking:** Art majors will locate, analyze and synthesize art historical information and context within their own work.
- **Degree Program Writing Competency:** Students will be able to effectively communicate in writing for purposes of the discipline.
- **Direction:** Art majors develop a personal direction through their choice of medium, idea and/or style. Students will demonstrate intellectual and artistic curiosity while committing to improvement.
- **Professional Proficiency:** Art majors will perceive, discuss and demonstrate professional proficiency upon graduation by applying their knowledge and skills of fine art.
- **Technique:** Art majors will demonstrate technical aptitude. The department assesses the technical quality of student production. Each medium varies with its technical demands.

## Related Links

Art, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/art-ba/>)

Art Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/art/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Modern Language Requirement	0-9
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	39
	Electives	39

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 12 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 12 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 12 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15

### Thematic Thread

Select 12 Credits (p. 29) <sup>2</sup>		12
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**Total Hours** **42**

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
Complete 0-9 credits		0-9
<b>Total Hours</b>		<b>0-9</b>

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 20 major credits must be taken at SRU or PASSHE
- 20 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Core Courses</b>		
ART 105	Basic Studio Drawing <sup>1</sup>	3
ART 225	Overview of Western Art <sup>1</sup>	3
ART 100	2-D Design <sup>1</sup>	3
or ART 101	3-D Design	
Subtotal		9
<b>300 Level Art History</b>		
Select one of the following:		3
ART 325	North American Art History <sup>1</sup>	
ART 335	The Renaissance Tradition <sup>1</sup>	
ART 345	Foundations of Modern Art <sup>1</sup>	
ART 355	Early Modern Art <sup>1</sup>	
ART 365	Art Since 1945 <sup>1</sup>	

Subtotal 3

### Basic Studio Elective

Select one of the following:		3
ART 106	Basic Studio Painting <sup>1</sup>	
ART 107	Basic Studio Photography <sup>1</sup>	
ART 108	Basic Studio Printmaking <sup>1</sup>	
ART 109	Basic Studio Metalsmithing <sup>1</sup>	
ART 110	Basic Studio Sculpture <sup>1</sup>	
ART 111	Basic Studio Fiber Art <sup>1</sup>	
ART 112	Basic Studio Ceramics <sup>1</sup>	
ART 113	Basic Studio Graphic Design <sup>1</sup>	
ART 114	Basic Studio Digital Media <sup>1</sup>	
Subtotal		3

### 2D Elective

Select one of the following:		3
ART 205	Intermediate Studio Drawing <sup>1</sup>	
ART 206	Intermediate Studio Painting <sup>1</sup>	
ART 207	Intermediate Studio Photography <sup>1</sup>	
ART 208	Intermediate Studio Printmaking <sup>1</sup>	
ART 213	Intermediate Studio Graphic Design <sup>1</sup>	
ART 214	Intermediate Studio Digital Media <sup>1</sup>	
Subtotal		3

### 3D Elective

Select one of the following:		3
ART 209	Intermediate Studio Metalsmithing <sup>1</sup>	
ART 210	Intermediate Studio Sculpture <sup>1</sup>	
ART 211	Intermediate Studio Fiber Art <sup>1</sup>	
ART 212	Intermediate Studio Ceramics <sup>1</sup>	
Subtotal		3

### 300 Level Electives

Select three of the following, you may take any class twice:		9
ART 305	Advanced Studio Drawing <sup>1</sup>	
ART 306	Advanced Studio Painting <sup>1</sup>	
ART 307	Advanced Studio Photography <sup>1</sup>	
ART 308	Advanced Studio Printmaking <sup>1</sup>	
ART 309	Advanced Studio Metalsmithing <sup>1</sup>	
ART 310	Advanced Studio Sculpture <sup>1</sup>	
ART 311	Advanced Studio Fiber Art <sup>1</sup>	
ART 312	Advanced Studio Ceramics <sup>1</sup>	
ART 313	Advanced Studio Graphic Design <sup>1</sup>	
ART 314	Advanced Studio Digital Media <sup>1</sup>	
Subtotal		9

### Senior Studio

Select three of the following, you may take any class twice:		9
ART 405	Senior Studio Drawing <sup>1</sup>	
ART 406	Senior Studio Painting <sup>1</sup>	
ART 407	Senior Studio Photography <sup>1</sup>	
ART 408	Senior Studio Printmaking <sup>1</sup>	
ART 409	Senior Studio Metalsmithing <sup>1</sup>	
ART 410	Senior Studio Sculpture <sup>1</sup>	
ART 411	Senior Studio Fiber Art <sup>1</sup>	
ART 412	Senior Studio Ceramics <sup>1</sup>	



ART 413	Senior Studio Graphic Design <sup>1</sup>	
ART 414	Senior Studio Digital Media <sup>1</sup>	
Subtotal		9
<b>Total Hours</b>		<b>39</b>

<sup>1</sup> Course counts for 50% of Major and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Student leadership development
5. Service opportunities (e.g., Empty Bowls program)
6. Career education and development
7. Internships
8. Student exhibitions
9. Field Experiences

ART - BA (5 04)

This program is effective as of Fall 2020.

Revised 02.2020

UCC 12.3.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
	Creative & Aesthetic Inquiry (p. 29)	3
ART 100	2-D Design	3
MODL 101	Modern Language Requirement	3
ESAP 101	FYRST Seminar *	1
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3

MATH 117	Quantitative Reasoning	3
ART 105	Basic Studio Drawing	3
ART 225	Overview of Western Art	3
Elective, Minor or Other Requirement		3
<b>Hours</b>		<b>15</b>

### Second Year

<b>Fall</b>		
POLS 235	Civil Discourse and Democracy	3
	Humanities Inquiry (p. 29)	3
ART 1XX	Basic Studio	3
ART 2XX	Intermediate Studio (2D Elective)	3
MODL 102	Modern Language Requirement	3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>

### Spring

SCI 102	Understanding the Physical World	3
ART 2XX	Intermediate Studio (3D Elective)	3
ART 3XX	Art History Elective	3
Elective, Minor, or Other Requirement		3
Elective, Minor, or Other Requirement		3
<b>Hours</b>		<b>15</b>

### Third Year

<b>Fall</b>		
	Thematic Thread Requirement (p. 29)	3
ART 3XX	Advanced Studio	3
ART 3XX	Advanced Studio	3
Elective, Minor, or Other Requirement		3
MODL 103	Modern Language Requirement	3
<b>Hours</b>		<b>15</b>

### Spring

	Thematic Thread Requirement (p. 29)	3
ART 3XX	Advanced Studio	3
ART 4XX	Senior Studio	3
Elective, Minor, or Other Requirement		3
Elective, Minor, or Other Requirement		3
<b>Hours</b>		<b>15</b>

### Fourth Year

<b>Fall</b>		
	Social Science Inquiry (p. 29)	
	Thematic Thread Requirement (p. 29)	3
ART 4XX	Senior Studio	3
Elective, Minor, or Other Requirement		3
Elective, Minor, or Other Requirement		3
<b>Hours</b>		<b>12</b>
<b>Spring</b>		
SCI 101	Science of Life	3
	Thematic Thread Requirement (p. 29)	3
ART 4XX	Senior Studio	3
Elective, Minor, or Other Requirement		3

Elective, Minor, or Other Requirement	3
<b>Hours</b>	<b>15</b>
<b>Total Hours**</b>	<b>118</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

Major Code: 5 04

Revision Code: 05.13.2022

## Art, Bachelor of Fine Arts (BFA)

### Program Learning Outcomes

- **Critical Thinking:** Art majors will locate, analyze and synthesize art historical information and context within their own work.
- **Degree Program Writing Competency:** Students will be able to effectively communicate in writing for purposes of the discipline.
- **Direction:** Art majors develop a personal direction through their choice of medium, idea and/or style. Students will demonstrate intellectual and artistic curiosity while committing to improvement.
- **Professional Proficiency:** Art majors will perceive, discuss and demonstrate professional proficiency upon graduation by applying their knowledge and skills of fine art.
- **Technique:** Art majors will demonstrate technical aptitude. The department assesses the technical quality of student production. Each medium varies with its technical demands.

### Related Links

Art, BFA Program Page (<https://www.sru.edu/academics/majors-and-minors/art-bfa/>)

Art Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/art/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3

Computer Competency	0-3
Major Requirements	78

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		

Select one of the following at SRU or another post-secondary institution:

CPSC 100	Introduction to Computing for Liberal Arts
CPSC 110	Computer Concepts
CPSC 130	Introduction to Computing and Programming
PE 202	Technology for Wellness

**Total Hours** **0-3**

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 39 major credits must be taken at SRU or PASSHE
- 39 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Courses</b>		
ART 100	2-D Design <sup>1</sup>	3
ART 101	3-D Design <sup>1</sup>	3
ART 105	Basic Studio Drawing <sup>1</sup>	3
ART 225	Overview of Western Art <sup>1</sup>	3
ART 226	Overview of World Art <sup>1</sup>	3
ART 300	Art Seminar <sup>1</sup>	3
Subtotal		18
<b>Art History Electives</b>		
Select two of the following:		6
ART 325	North American Art History <sup>1</sup>	
ART 335	The Renaissance Tradition <sup>1</sup>	
ART 345	Foundations of Modern Art <sup>1</sup>	
ART 355	Early Modern Art <sup>1</sup>	
ART 365	Art Since 1945 <sup>1</sup>	
ART 420	Art History Seminar <sup>1</sup>	
Subtotal		6
<b>100 Level Electives</b>		
Select three of the following, no class may be repeated:		9
ART 106	Basic Studio Painting <sup>1</sup>	
ART 107	Basic Studio Photography <sup>1</sup>	
ART 108	Basic Studio Printmaking <sup>1</sup>	
ART 109	Basic Studio Metalsmithing <sup>1</sup>	
ART 110	Basic Studio Sculpture <sup>1</sup>	
ART 111	Basic Studio Fiber Art <sup>1</sup>	
ART 112	Basic Studio Ceramics <sup>1</sup>	
ART 113	Basic Studio Graphic Design <sup>1</sup>	
ART 114	Basic Studio Digital Media <sup>1</sup>	
Subtotal		9
<b>200 Level Electives</b>		
Select four of the following courses, take any class twice:		12
ART 205	Intermediate Studio Drawing <sup>1</sup>	
ART 206	Intermediate Studio Painting <sup>1</sup>	
ART 207	Intermediate Studio Photography <sup>1</sup>	

ART 208	Intermediate Studio Printmaking <sup>1</sup>	
ART 209	Intermediate Studio Metalsmithing	
ART 210	Intermediate Studio Sculpture <sup>1</sup>	
ART 211	Intermediate Studio Fiber Art <sup>1</sup>	
ART 212	Intermediate Studio Ceramics <sup>1</sup>	
ART 213	Intermediate Studio Graphic Design <sup>1</sup>	
ART 214	Intermediate Studio Digital Media <sup>1</sup>	
Subtotal		12
<b>300 Level Electives</b>		
Select four of the following, take any class up to three times:		12
ART 305	Advanced Studio Drawing <sup>1</sup>	
ART 306	Advanced Studio Painting <sup>1</sup>	
ART 307	Advanced Studio Photography <sup>1</sup>	
ART 308	Advanced Studio Printmaking <sup>1</sup>	
ART 309	Advanced Studio Metalsmithing <sup>1</sup>	
ART 310	Advanced Studio Sculpture <sup>1</sup>	
ART 311	Advanced Studio Fiber Art <sup>1</sup>	
ART 312	Advanced Studio Ceramics <sup>1</sup>	
ART 313	Advanced Studio Graphic Design <sup>1</sup>	
ART 314	Advanced Studio Digital Media <sup>1</sup>	
Subtotal		12
<b>400 Level Electives</b>		
Select three of the following, take any class up to two times:		9
ART 405	Senior Studio Drawing <sup>1</sup>	
ART 406	Senior Studio Painting <sup>1</sup>	
ART 407	Senior Studio Photography <sup>1</sup>	
ART 408	Senior Studio Printmaking <sup>1</sup>	
ART 409	Senior Studio Metalsmithing <sup>1</sup>	
ART 410	Senior Studio Sculpture <sup>1</sup>	
ART 411	Senior Studio Fiber Art <sup>1</sup>	
ART 412	Senior Studio Ceramics <sup>1</sup>	
ART 413	Senior Studio Graphic Design <sup>1</sup>	
ART 414	Senior Studio Digital Media <sup>1</sup>	
Subtotal		9
<b>SR Project</b>		
Select one of the following, 400 level pre-req or permission of instructor:		3
ART 425	Senior Project Drawing <sup>1</sup>	
ART 426	Senior Project Painting <sup>1</sup>	
ART 427	Senior Project Photography <sup>1</sup>	
ART 428	Senior Project Printmaking <sup>1</sup>	
ART 429	Senior Project Metalsmithing <sup>1</sup>	
ART 430	Senior Project Sculpture <sup>1</sup>	
ART 431	Senior Project Fiber Art <sup>1</sup>	
ART 432	Senior Project Ceramics <sup>1</sup>	
ART 433	Senior Project Graphic Design <sup>1</sup>	
ART 434	Senior Project Digital Media <sup>1</sup>	
Subtotal		3
<b>Art Electives</b>		
Select three 300-400 level courses <sup>1</sup>		9
<b>Total Hours</b>		<b>78</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Student leadership development
5. Service opportunities (e.g., Empty Bowls program)
6. Career education and development
7. Internships
8. Student exhibitions
9. Field Experiences

ART - BFA (5305)

This program is effective as of Fall 2020.

Revised 02.2020

UCC 12.3.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ART 100	2-D Design	3
ART 105	Basic Studio Drawing	3
ART 225	Overview of Western Art <sup>3</sup>	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
ART 101	3-D Design	3
ART 1XX	Basic Studio	3
ART 1XX	Basic Studio	3
<b>Hours</b>		<b>15</b>

### Second Year

#### Fall

POLS 235	Civil Discourse and Democracy	3
Humanities Inquiry (p. 29)		3
Creative & Aesthetic Inquiry (p. 29)		3
ART 1XX	Basic Studio	3
ART 2XX	Intermediate Studio	3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>

#### Spring

SCI 102	Understanding the Physical World	3
ART 226	Overview of World Art	3
ART 2XX	Intermediate Studio	3
ART 2XX	Intermediate Studio	3
ART 2XX	Intermediate Studio	3
<b>Hours</b>		<b>15</b>

### Third Year

#### Fall

SCI 101	Science of Life	3
ART 3XX	Art History	3
ART 3XX	Advanced Studio	3
ART 3XX	Advanced Studio	3
ART 3XX/4XX	Art Elective	3
<b>Hours</b>		<b>15</b>

#### Spring

Thematic Thread Requirement (p. 29)		3
Social Science Inquiry (p. 29)		3
ART 3XX	Advanced Studio	3
ART 3XX	Advanced Studio	3
ART 300	Art Seminar	3
<b>Hours</b>		<b>15</b>

### Fourth Year

#### Fall

Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
ART 4XX	Senior Studio	3
ART 4XX	Senior Studio	3
ART 30X/40X	ART Elective	3
<b>Hours</b>		<b>15</b>

#### Spring

ART 30X or 40X Art Elective		3
Thematic Thread Requirement (p. 29)		3
ART 30X/40X	ART Elective	3
ART 4XX	Senior Studio	3
ART 4XX	Senior Project	3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>3</sup> Meets Creative & Aesthetics Inquiry requirement for the Rock Integrated Studies Program.

\* Students are encouraged to take ESAP 101 as a Free Elective.

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

Major Code: 5305

Revision date: 05.13.2022

## Art, Bachelor of Fine Arts (BFA) - Concentration in Ceramic Arts

### Program Learning Outcomes

- **Critical Thinking:** Art majors will locate, analyze and synthesize art historical information and context within their own work.
- **Degree Program Writing Competency:** Students will be able to effectively communicate in writing for purposes of the discipline.
- **Direction:** Art majors develop a personal direction through their choice of medium, idea and/or style. Students will demonstrate intellectual and artistic curiosity while committing to improvement.
- **Professional Proficiency:** Art majors will perceive, discuss and demonstrate professional proficiency upon graduation by applying their knowledge and skills of fine art.
- **Technique:** Art majors will demonstrate technical aptitude. The department assesses the technical quality of student production. Each medium varies with its technical demands.

### Related Links

Art - Ceramic Arts, BFA Program Page (<https://www.sru.edu/academics/majors-and-minors/art-bfa-concentration-in-ceramics/>)

Art Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/art/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	78

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Science Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	



CPSC 110	Computer Concepts
CPSC 130	Introduction to Computing and Programming
PE 202	Technology for Wellness

**Total Hours** **0-3**

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 39 major credits must be taken at SRU or PASSHE
- 39 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Courses</b>		
ART 100	2-D Design <sup>1</sup>	3
ART 101	3-D Design <sup>1</sup>	3
ART 105	Basic Studio Drawing <sup>1</sup>	3
ART 225	Overview of Western Art <sup>1</sup>	3
ART 226	Overview of World Art <sup>1</sup>	3
ART 300	Art Seminar <sup>1</sup>	3

### Art History Electives

Select two of the following:		6
ART 325	North American Art History <sup>1</sup>	
ART 335	The Renaissance Tradition <sup>1</sup>	
ART 345	Foundations of Modern Art <sup>1</sup>	
ART 355	Early Modern Art <sup>1</sup>	
ART 365	Art Since 1945 <sup>1</sup>	
ART 420	Art History Seminar <sup>1</sup>	

### Ceramic Arts Concentration (15 credits)

Concentration courses count towards BFA Studio requirements. (200-400 level courses are repeatable - see below for course details).

Select 12 credits from the following:		
ART 112	Basic Studio Ceramics <sup>1</sup>	0-3
ART 212	Intermediate Studio Ceramics <sup>1</sup>	0-6
ART 312	Advanced Studio Ceramics <sup>1</sup>	0-9
ART 412	Senior Studio Ceramics <sup>1</sup>	0-6
<i>Ceramic Arts 1st Concentration Required - Capstone Course</i>		3
ART 432	Senior Project Ceramics <sup>1</sup>	

### Additional Studio Requirements

<b>100 Level Electives</b>		
Select three of the following courses, no class may be repeated:		9
ART 106	Basic Studio Painting <sup>1</sup>	
ART 107	Basic Studio Photography <sup>1</sup>	
ART 108	Basic Studio Printmaking <sup>1</sup>	
ART 109	Basic Studio Metalsmithing <sup>1</sup>	
ART 110	Basic Studio Sculpture <sup>1</sup>	
ART 111	Basic Studio Fiber Art <sup>1</sup>	
ART 112	Basic Studio Ceramics	
ART 113	Basic Studio Graphic Design <sup>1</sup>	

### 200 Level Electives

Select four of the following courses, you may take any class twice: 12

ART 205	Intermediate Studio Drawing <sup>1</sup>
ART 206	Intermediate Studio Painting <sup>1</sup>
ART 207	Intermediate Studio Photography <sup>1</sup>
ART 208	Intermediate Studio Printmaking <sup>1</sup>
ART 209	Intermediate Studio Metalsmithing <sup>1</sup>
ART 210	Intermediate Studio Sculpture <sup>1</sup>
ART 211	Intermediate Studio Fiber Art <sup>1</sup>
ART 212	Intermediate Studio Ceramics <sup>1</sup>
ART 213	Intermediate Studio Graphic Design <sup>1</sup>
ART 214	Intermediate Studio Digital Media <sup>1</sup>

### 300 Level Electives

Select four of the following courses, you may take any class up to three times: 12

ART 305	Advanced Studio Drawing <sup>1</sup>
ART 306	Advanced Studio Painting <sup>1</sup>
ART 307	Advanced Studio Photography <sup>1</sup>
ART 308	Advanced Studio Printmaking <sup>1</sup>
ART 309	Advanced Studio Metalsmithing <sup>1</sup>
ART 310	Advanced Studio Sculpture <sup>1</sup>
ART 311	Advanced Studio Fiber Art <sup>1</sup>
ART 312	Advanced Studio Ceramics <sup>1</sup>
ART 313	Advanced Studio Graphic Design <sup>1</sup>
ART 314	Advanced Studio Digital Media <sup>1</sup>

### 400 Level Electives

Select three of the following courses, you may take any class up to two times: 9

ART 405	Senior Studio Drawing <sup>1</sup>
ART 406	Senior Studio Painting <sup>1</sup>
ART 407	Senior Studio Photography <sup>1</sup>
ART 408	Senior Studio Printmaking <sup>1</sup>
ART 409	Senior Studio Metalsmithing <sup>1</sup>
ART 410	Senior Studio Sculpture <sup>1</sup>
ART 411	Senior Studio Fiber Art <sup>1</sup>
ART 412	Senior Studio Ceramics <sup>1</sup>
ART 413	Senior Studio Graphic Design <sup>1</sup>
ART 414	Senior Studio Digital Media <sup>1</sup>

### Art Electives

Select from 300-400 level courses 9

**Total Hours** **78**

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Student leadership development
5. Service opportunities (e.g., Empty Bowls program)
6. Career education and development
7. Internships
8. Student exhibitions
9. Field Experiences

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

ART - BFA (5305)

Concentration in Ceramic Arts (CERA)

This program is effective as of Fall 2020.

Revised 03.09.2021

UCC 12.3.2019

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ART 225	Overview of Western Art	3
ART 100	2-D Design	3
ART 105	Basic Studio Drawing	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
ART 101	3-D Design	3
ART 1XX	Basic Studio (Ceramic Arts Concentration)	3
ART 1XX	Basic Studio	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
POLS 235	Civil Discourse and Democracy	3
Humanities Inquiry (p. 29)		3
Creative & Aesthetic Inquiry (p. 29)		3
ART 1XX	Basic Studio	3
ART 2XX	Intermediate Studio	3

### Declare a Thematic Thread <sup>1</sup>

<b>Hours</b>		<b>15</b>
<b>Spring</b>		
SCI 102	Understanding the Physical World	3
ART 226	Overview of World Art	3
ART 2XX	Intermediate Studio (Ceramic Arts Concentration)	3
ART 2XX	Intermediate Studio	3
ART 2XX	Intermediate Studio	3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
SCI 101	Science of Life	3
ART 3XX	Art History	3
ART 3XX	Advanced Studio	3
ART 3XX	Advanced Studio	3
ART 30X or 40X ART Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Thematic Thread Requirement (p. 29)		3
Social Science Inquiry (p. 29)		3
ART 3XX	Advanced Studio	3
ART 3XX	Advanced Studio (Ceramic Arts Concentration)	3
ART 300	Art Seminar	3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
ART 4XX	Senior Studio	3
ART 4XX	Senior Studio (Ceramic Arts Concentration)	3
ART 30X or 40X ART Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ART 3XX	Art History	3
Thematic Thread Requirement (p. 29)		3
ART 30X or 40X Art Elective		3
ART 4xX	Senior Studio	3
ART 4xX	Senior Project (Ceramic Arts Concentration)	3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>121</b>

<sup>1</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to

registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

ART - BFA (5305)  
Concentration in Ceramic Arts (CERA)  
Revised: 05.13.2022

## Art, Bachelor of Fine Arts (BFA) - Concentration in Digital Media

### Program Learning Outcomes

- **Critical Thinking:** Art majors will locate, analyze and synthesize art historical information and context within their own work.
- **Degree Program Writing Competency:** Students will be able to effectively communicate in writing for purposes of the discipline.
- **Direction:** Art majors develop a personal direction through their choice of medium, idea and/or style. Students will demonstrate intellectual and artistic curiosity while committing to improvement.
- **Professional Proficiency:** Art majors will perceive, discuss and demonstrate professional proficiency upon graduation by applying their knowledge and skills of fine art.
- **Technique:** Art majors will demonstrate technical aptitude. The department assesses the technical quality of student production. Each medium varies with its technical demands.

### Related Links

Art - Digital Media, BFA Program Page (<https://www.sru.edu/academics/majors-and-minors/art-bfa-digital-media/>)

Art Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/art/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher  
Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	78

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3

MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Science Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 39 major credits must be taken at SRU or PASSHE
- 39 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Courses</b>		
ART 100	2-D Design <sup>1</sup>	3
ART 101	3-D Design <sup>1</sup>	3
ART 105	Basic Studio Drawing <sup>1</sup>	3
ART 225	Overview of Western Art <sup>1</sup>	3
ART 226	Overview of World Art <sup>1</sup>	3
ART 300	Art Seminar <sup>1</sup>	3

### Art History Electives

Select two of the following:		6
ART 325	North American Art History <sup>1</sup>	
ART 335	The Renaissance Tradition <sup>1</sup>	
ART 345	Foundations of Modern Art <sup>1</sup>	
ART 355	Early Modern Art <sup>1</sup>	
ART 365	Art Since 1945 <sup>1</sup>	
ART 420	Art History Seminar <sup>1</sup>	

### Digital Media Concentration (15 Credits)

Concentration courses count towards BFA Studio requirements. (200-400 level courses are repeatable – see below for course details - see below for course details).

Select 12 credits from the following:		
ART 114	Basic Studio Digital Media <sup>1</sup>	0-3
ART 214	Intermediate Studio Digital Media <sup>1</sup>	0-6
ART 314	Advanced Studio Digital Media <sup>1</sup>	0-9
ART 414	Senior Studio Digital Media <sup>1</sup>	0-6

*Digital Media 1st Concentration Required – Capstone Course*

ART 434	Senior Project Digital Media <sup>1</sup>	3
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### Additional Studio Requirements

#### 100 Level Electives

Select three of the following courses, no class may be repeated:		9
ART 106	Basic Studio Painting <sup>1</sup>	
ART 107	Basic Studio Photography <sup>1</sup>	
ART 108	Basic Studio Printmaking <sup>1</sup>	
ART 109	Basic Studio Metalsmithing <sup>1</sup>	
ART 110	Basic Studio Sculpture <sup>1</sup>	
ART 111	Basic Studio Fiber Art <sup>1</sup>	
ART 112	Basic Studio Ceramics <sup>1</sup>	
ART 113	Basic Studio Graphic Design <sup>1</sup>	

#### 200 Level Electives

Select four of the following courses, you may take any class twice:		12
ART 205	Intermediate Studio Drawing <sup>1</sup>	
ART 206	Intermediate Studio Painting <sup>1</sup>	
ART 207	Intermediate Studio Photography <sup>1</sup>	

ART 208	Intermediate Studio Printmaking <sup>1</sup>	
ART 209	Intermediate Studio Metalsmithing <sup>1</sup>	
ART 210	Intermediate Studio Sculpture <sup>1</sup>	
ART 211	Intermediate Studio Fiber Art <sup>1</sup>	
ART 212	Intermediate Studio Ceramics <sup>1</sup>	
ART 213	Intermediate Studio Graphic Design <sup>1</sup>	
ART 214	Intermediate Studio Digital Media <sup>1</sup>	

#### 300 Level Electives

Select four of the following courses, you may take any class up to three times: 12

ART 305	Advanced Studio Drawing <sup>1</sup>	
ART 306	Advanced Studio Painting <sup>1</sup>	
ART 307	Advanced Studio Photography <sup>1</sup>	
ART 308	Advanced Studio Printmaking <sup>1</sup>	
ART 309	Advanced Studio Metalsmithing <sup>1</sup>	
ART 310	Advanced Studio Sculpture <sup>1</sup>	
ART 311	Advanced Studio Fiber Art <sup>1</sup>	
ART 312	Advanced Studio Ceramics <sup>1</sup>	
ART 313	Advanced Studio Graphic Design <sup>1</sup>	
ART 314	Advanced Studio Digital Media <sup>1</sup>	

#### 400 Level Electives

Select three of the following courses, you may take any class up to two times: 9

ART 405	Senior Studio Drawing <sup>1</sup>	
ART 406	Senior Studio Painting <sup>1</sup>	
ART 407	Senior Studio Photography <sup>1</sup>	
ART 408	Senior Studio Printmaking <sup>1</sup>	
ART 409	Senior Studio Metalsmithing <sup>1</sup>	
ART 410	Senior Studio Sculpture <sup>1</sup>	
ART 411	Senior Studio Fiber Art <sup>1</sup>	
ART 412	Senior Studio Ceramics <sup>1</sup>	
ART 413	Senior Studio Graphic Design <sup>1</sup>	
ART 414	Senior Studio Digital Media <sup>1</sup>	

#### Art Electives

Select from 300-400 level courses <sup>1</sup>		9
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<b>Total Hours</b>	<b>78</b>
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<sup>1</sup> Course counts for 50% of Major requirements and Major GPA.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Student leadership development
5. Service opportunities (e.g., Empty Bowls program)
6. Career education and development

7. Internships
8. Student exhibitions
9. Field Experiences

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

ART - BFA (5305)

Concentration in Digital Media (DGME)

This program is effective as of Fall 2020.

Revised 03.09.2021

UCC 12.3.2019

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ART 225	Overview of Western Art	3
ART 100	2-D Design	3
ART 105	Basic Studio Drawing	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
ART 101	3-D Design	3
ART 1X X	Basic Studio (Digital Media Concentration)	3
ART 1XX	Basic Studio	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
POLS 235	Civil Discourse and Democracy	3
Humanities Inquiry (p. 29)		3
Creative & Aesthetic Inquiry (p. 29)		3
ART 1XX	Basic Studio	3
ART 2XX	Intermediate Studio	3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
SCI 102	Understanding the Physical World	3
ART 226	Overview of World Art	3
ART 2XX	Intermediate Studio	3
ART 2XX	Intermediate Studio	3

ART 2XX	Intermediate Studio (Digital Media Concentration)	3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
SCI 101	Science of Life	3
ART 30X	Art History	3
ART 3XX	Advanced Studio	3
ART 3XX	Advanced Studio	3
ART 30X or 40X ART Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Thematic Thread Requirement (p. 29)		3
Social Science Inquiry (p. 29)		3
ART 3XX	Advanced Studio	3
ART 3XX	Advanced Studio (Digital Media Concentration)	3
ART 300	Art Seminar	3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
ART 4XX	Senior Studio	3
ART 4XX	Senior Studio (Digital Media Concentration)	3
ART 30X or 40X ART Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ART 3XX	Art History	3
Thematic Thread Requirement (p. 29)		3
ART 30X or 40X Art Elective		3
ART 4xX	Senior Studio	3
ART 4xX	Senior Project (Digital Media Concentration)	3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

ART - BFA (5305)

Concentration in Digital Media (DGME)

Revised: 05.13.2022



# Art, Bachelor of Fine Arts (BFA) - Concentration in Drawing

## Program Learning Outcomes

- **Critical Thinking:** Art majors will locate, analyze and synthesize art historical information and context within their own work.
- **Degree Program Writing Competency:** Students will be able to effectively communicate in writing for purposes of the discipline.
- **Direction:** Art majors develop a personal direction through their choice of medium, idea and/or style. Students will demonstrate intellectual and artistic curiosity while committing to improvement.
- **Professional Proficiency:** Art majors will perceive, discuss and demonstrate professional proficiency upon graduation by applying their knowledge and skills of fine art.
- **Technique:** Art majors will demonstrate technical aptitude. The department assesses the technical quality of student production. Each medium varies with its technical demands.

## Related Links

Art - Drawing, BFA Program Page (<https://www.sru.edu/academics/majors-and-minors/art-bfa-concentration-in-drawing/>)

Art Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/art/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	78

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Science Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 39 major credits must be taken at SRU or PASSHE
- 39 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Courses</b>		
ART 100	2-D Design <sup>1</sup>	3
ART 101	3-D Design <sup>1</sup>	3
ART 105	Basic Studio Drawing <sup>1</sup>	3
ART 225	Overview of Western Art <sup>1</sup>	3
ART 226	Overview of World Art <sup>1</sup>	3
ART 300	Art Seminar <sup>1</sup>	3
<b>Art History Electives</b>		
Select two of the following:		6
ART 325	North American Art History <sup>1</sup>	
ART 335	The Renaissance Tradition <sup>1</sup>	
ART 345	Foundations of Modern Art <sup>1</sup>	
ART 355	Early Modern Art <sup>1</sup>	
ART 365	Art Since 1945 <sup>1</sup>	
ART 420	Art History Seminar <sup>1</sup>	
<b>Drawing Concentration (15 Credits)</b>		
Concentration courses count towards BFA Studio requirements. (200-400 level courses are repeatable - see below for course details.)		
Select 12 credits from the following:		
ART 205	Intermediate Studio Drawing <sup>1</sup>	0-6
ART 305	Advanced Studio Drawing <sup>1</sup>	0-9
ART 405	Senior Studio Drawing <sup>1</sup>	0-6
<i>Drawing 1st Concentration Required – Capstone Course</i>		
ART 425	Senior Project Drawing <sup>1</sup>	3
<b>Additional Studio Requirements</b>		
<b>100 Level Electives</b>		
Select three of the following courses, no class may be repeated:		9
ART 106	Basic Studio Painting <sup>1</sup>	
ART 107	Basic Studio Photography <sup>1</sup>	
ART 108	Basic Studio Printmaking <sup>1</sup>	
ART 109	Basic Studio Metalsmithing <sup>1</sup>	
ART 110	Basic Studio Sculpture <sup>1</sup>	
ART 111	Basic Studio Fiber Art <sup>1</sup>	
ART 112	Basic Studio Ceramics <sup>1</sup>	
ART 113	Basic Studio Graphic Design <sup>1</sup>	
<b>200 Level Electives</b>		
Select four of the following courses, you may take any class twice:		12
ART 205	Intermediate Studio Drawing <sup>1</sup>	
ART 206	Intermediate Studio Painting <sup>1</sup>	
ART 207	Intermediate Studio Photography <sup>1</sup>	
ART 208	Intermediate Studio Printmaking <sup>1</sup>	
ART 209	Intermediate Studio Metalsmithing <sup>1</sup>	
ART 210	Intermediate Studio Sculpture <sup>1</sup>	
ART 211	Intermediate Studio Fiber Art <sup>1</sup>	
ART 212	Intermediate Studio Ceramics <sup>1</sup>	
ART 213	Intermediate Studio Graphic Design <sup>1</sup>	

ART 214	Intermediate Studio Digital Media <sup>1</sup>	
<b>300 Level Electives</b>		
Select four of the following courses, you may take any class up to three times:		12
ART 305	Advanced Studio Drawing <sup>1</sup>	
ART 306	Advanced Studio Painting <sup>1</sup>	
ART 307	Advanced Studio Photography <sup>1</sup>	
ART 308	Advanced Studio Printmaking <sup>1</sup>	
ART 309	Advanced Studio Metalsmithing <sup>1</sup>	
ART 310	Advanced Studio Sculpture <sup>1</sup>	
ART 311	Advanced Studio Fiber Art <sup>1</sup>	
ART 312	Advanced Studio Ceramics <sup>1</sup>	
ART 313	Advanced Studio Graphic Design <sup>1</sup>	
ART 314	Advanced Studio Digital Media <sup>1</sup>	
<b>400 Level Electives</b>		
Select three of the following courses, you may take any class up to two times:		9
ART 405	Senior Studio Drawing <sup>1</sup>	
ART 406	Senior Studio Painting <sup>1</sup>	
ART 407	Senior Studio Photography <sup>1</sup>	
ART 408	Senior Studio Printmaking <sup>1</sup>	
ART 409	Senior Studio Metalsmithing <sup>1</sup>	
ART 410	Senior Studio Sculpture <sup>1</sup>	
ART 411	Senior Studio Fiber Art <sup>1</sup>	
ART 412	Senior Studio Ceramics <sup>1</sup>	
ART 413	Senior Studio Graphic Design <sup>1</sup>	
ART 414	Senior Studio Digital Media <sup>1</sup>	
<b>Art Electives</b>		
Select from 300-400 level courses <sup>1</sup>		9
<b>Total Hours</b>		<b>78</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Student leadership development
5. Service opportunities (e.g., Empty Bowls program)
6. Career education and development
7. Internships
8. Student exhibitions
9. Field Experiences

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled

SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

ART - BFA (5305)

Concentration in Drawing (DRAW)

This program is effective as of Fall 2020.

Revised 03.09.2021

UCC 12.3.2019

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
SUBJ 139	Foundations of Academic Discovery <sup>2</sup>	3
ENGL 102	Critical Writing	3
ART 225	Overview of Western Art	3
ART 100	2-D Design	3
ART 105	Basic Studio Drawing	3
ESAP 101	FYRST Seminar <sup>*</sup>	1
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
ART 101	3-D Design	3
ART 1X X	Basic Studio (Drawing Concentration)	3
ART 1XX	Basic Studio	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
POLS 235	Civil Discourse and Democracy	3
Humanities Inquiry (p. 29)		3
Creative & Aesthetic Inquiry (p. 29)		3
ART 1XX	Basic Studio	3
ART 2XX	Intermediate Studio	3
Declare a Thematic Thread <sup>1</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
SCI 102	Understanding the Physical World	3
ART 226	Overview of World Art	3
ART 2XX	Intermediate Studio	3
ART 2XX	Intermediate Studio	3
ART 2XX	Intermediate Studio (Drawing Concentration)	3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
SCI 101	Science of Life	3
ART 30X	Art History	3

ART 3XX	Advanced Studio	3
ART 3XX	Advanced Studio	3
ART 30X or 40X ART Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Thematic Thread Requirement (p. 29)		3
Social Science Inquiry (p. 29)		3
ART 3XX	Advanced Studio	3
ART 3XX	Advanced Studio (Drawing Concentration)	3
ART 300	Art Seminar	3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
ART 4XX	Senior Studio	3
ART 4XX	Senior Studio (Drawing Concentration)	3
ART 30X or 40X ART Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ART 3XX	Art History	3
Thematic Thread Requirement (p. 29)		3
ART 30X or 40X Art Elective		3
ART 4xX	Senior Studio	3
ART 4xX	Senior Project (Drawing Concentration)	3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>121</b>

<sup>1</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>2</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>\*</sup> Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

ART - BFA (5305)

Concentration in Drawing (DRAW)

Revised: 05.13.2022

## Art, Bachelor of Fine Arts (BFA) - Concentration in Fiber Arts

### Program Learning Outcomes

- **Critical Thinking:** Art majors will locate, analyze and synthesize art historical information and context within their own work.
- **Degree Program Writing Competency:** Students will be able to effectively communicate in writing for purposes of the discipline.

- **Direction:** Art majors develop a personal direction through their choice of medium, idea and/or style. Students will demonstrate intellectual and artistic curiosity while committing to improvement.
- **Professional Proficiency:** Art majors will perceive, discuss and demonstrate professional proficiency upon graduation by applying their knowledge and skills of fine art.
- **Technique:** Art majors will demonstrate technical aptitude. The department assesses the technical quality of student production. Each medium varies with its technical demands.

## Related Links

Art - Fiber Arts, BFA Program Page (<https://www.sru.edu/academics/majors-and-minors/art-bfa-fiber-art/>)

Art Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/art/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	78

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Science Inquiry</i>		

SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

### Major Requirements

- 39 major credits must be taken at SRU or PASSHE
- 39 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Courses</b>		
ART 100	2-D Design <sup>1</sup>	3
ART 101	3-D Design <sup>1</sup>	3
ART 105	Basic Studio Drawing <sup>1</sup>	3

ART 225	Overview of Western Art <sup>1</sup>	3
ART 226	Overview of World Art <sup>1</sup>	3
ART 300	Art Seminar <sup>1</sup>	3

**Art History Electives**

Select two of the following: 6

ART 325	North American Art History <sup>1</sup>	
ART 335	The Renaissance Tradition <sup>1</sup>	
ART 345	Foundations of Modern Art <sup>1</sup>	
ART 355	Early Modern Art <sup>1</sup>	
ART 365	Art Since 1945 <sup>1</sup>	
ART 420	Art History Seminar <sup>1</sup>	

**Fiber Art Concentration (15 Credits)**

Concentration courses count towards BFA Studio requirements.  
(200-400 level courses are repeatable - see below for course details).

Select 12 credits from the following:

ART 111	Basic Studio Fiber Art <sup>1</sup>	0-3
ART 211	Intermediate Studio Fiber Art <sup>1</sup>	0-6
ART 311	Advanced Studio Fiber Art <sup>1</sup>	0-9
ART 411	Senior Studio Fiber Art <sup>1</sup>	0-6

*Fiber Art 1st Concentration Required – Capstone Course*

ART 431	Senior Project Fiber Art	3
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**Additional Studio Requirements****100 Level Electives**

Select three of the following courses, no class may be repeated: 9

ART 106	Basic Studio Painting <sup>1</sup>	
ART 107	Basic Studio Photography <sup>1</sup>	
ART 108	Basic Studio Printmaking <sup>1</sup>	
ART 109	Basic Studio Metalsmithing <sup>1</sup>	
ART 110	Basic Studio Sculpture <sup>1</sup>	
ART 111	Basic Studio Fiber Art <sup>1</sup>	
ART 112	Basic Studio Ceramics <sup>1</sup>	
ART 113	Basic Studio Graphic Design <sup>1</sup>	

**200 Level Electives**

Select four of the following courses, you may take any class twice: 12

ART 205	Intermediate Studio Drawing <sup>1</sup>	
ART 206	Intermediate Studio Painting <sup>1</sup>	
ART 207	Intermediate Studio Photography <sup>1</sup>	
ART 208	Intermediate Studio Printmaking <sup>1</sup>	
ART 209	Intermediate Studio Metalsmithing <sup>1</sup>	
ART 210	Intermediate Studio Sculpture <sup>1</sup>	
ART 211	Intermediate Studio Fiber Art <sup>1</sup>	
ART 212	Intermediate Studio Ceramics <sup>1</sup>	
ART 213	Intermediate Studio Graphic Design <sup>1</sup>	
ART 214	Intermediate Studio Digital Media <sup>1</sup>	

**300 Level Electives**

Select four of the following courses, you may take any class up to three times: 12

ART 305	Advanced Studio Drawing <sup>1</sup>	
ART 306	Advanced Studio Painting <sup>1</sup>	
ART 307	Advanced Studio Photography <sup>1</sup>	
ART 308	Advanced Studio Printmaking <sup>1</sup>	

ART 309	Advanced Studio Metalsmithing <sup>1</sup>	
ART 310	Advanced Studio Sculpture <sup>1</sup>	
ART 311	Advanced Studio Fiber Art <sup>1</sup>	
ART 312	Advanced Studio Ceramics <sup>1</sup>	
ART 313	Advanced Studio Graphic Design <sup>1</sup>	
ART 314	Advanced Studio Digital Media <sup>1</sup>	

**400 Level Electives**

Select three of the following courses, you may take any class up to two times: 9

ART 405	Senior Studio Drawing <sup>1</sup>	
ART 406	Senior Studio Painting <sup>1</sup>	
ART 407	Senior Studio Photography <sup>1</sup>	
ART 408	Senior Studio Printmaking <sup>1</sup>	
ART 409	Senior Studio Metalsmithing <sup>1</sup>	
ART 410	Senior Studio Sculpture <sup>1</sup>	
ART 411	Senior Studio Fiber Art <sup>1</sup>	
ART 412	Senior Studio Ceramics <sup>1</sup>	
ART 413	Senior Studio Graphic Design <sup>1</sup>	
ART 414	Senior Studio Digital Media <sup>1</sup>	

**Art Electives**Select from 300-400 level courses <sup>1</sup> 9**Total Hours** 78<sup>1</sup> Course counts for 50% of Major requirements and Major GPA.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**Co-curricular and Experiential Learning**

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Student leadership development
5. Service opportunities (e.g., Empty Bowls program)
6. Career education and development
7. Internships
8. Student exhibitions
9. Field Experiences

**Important Curriculum Guide Notes**

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions



ART - BFA (5305)

Concentration in Fiber Art (FIBA)

This program is effective as of Fall 2020.

Revised 03.09.2021

UCC 12.3.2019

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ART 225	Overview of Western Art	3
ART 100	2-D Design	3
ART 105	Basic Studio Drawing	3
ESAP 101	FYRST Seminar *	1
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
ART 101	3-D Design	3
ART 1X X	Basic Studio (Fiber Arts Concentration)	3
ART 1XX	Basic Studio	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
POLS 235	Civil Discourse and Democracy	3
Humanities Inquiry (p. 29)		3
Creative & Aesthetic Inquiry (p. 29)		3
ART 1XX	Basic Studio	3
ART 2XX	Intermediate Studio	3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
SCI 102	Understanding the Physical World	3
ART 226	Overview of World Art	3
ART 2XX	Intermediate Studio	3
ART 2XX	Intermediate Studio	3
ART 2XX	Intermediate Studio (Fiber Arts Concentration)	3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
SCI 101	Science of Life	3
ART 30X	Art History	3
ART 3XX	Advanced Studio	3
ART 3XX	Advanced Studio	3
ART 30X or 40X ART Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Thematic Thread Requirement (p. 29)		3
Social Science Inquiry (p. 29)		3
ART 3XX	Advanced Studio	3

ART 3XX	Advanced Studio (Fiber Arts Concentration)	3
ART 300	Art Seminar	3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
ART 4XX	Senior Studio	3
ART 4XX	Senior Studio (Fiber Arts Concentration)	3
ART 30X or 40X ART Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ART 3XX	Art History	3
Thematic Thread Requirement (p. 29)		3
ART 30X or 40X Art Elective		3
ART 4xX	Senior Studio	3
ART 4xX	Senior Project (Fiber Arts Concentration)	3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

ART - BFA (5305)

Concentration in Fiber Art (FIBA)

Revised: 05.13.2022

## Art, Bachelor of Fine Arts (BFA) - Concentration in Graphic Design

### Program Learning Outcomes

- **Critical Thinking:** Art majors will locate, analyze and synthesize art historical information and context within their own work.
- **Degree Program Writing Competency:** Students will be able to effectively communicate in writing for purposes of the discipline.
- **Direction:** Art majors develop a personal direction through their choice of medium, idea and/or style. Students will demonstrate intellectual and artistic curiosity while committing to improvement.
- **Professional Proficiency:** Art majors will perceive, discuss and demonstrate professional proficiency upon graduation by applying their knowledge and skills of fine art.
- **Technique:** Art majors will demonstrate technical aptitude. The department assesses the technical quality of student production. Each medium varies with its technical demands.

## Related Links

Art - Graphic Design, BFA Program Page (<https://www.sru.edu/academics/majors-and-minors/art-bfa-graphic-design/>)

Art Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/art/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.00 or higher

Overall GPA: 2.00 or higher

### Summary\*

Code	Title	Hours
Rock Studies 2 Requirements		42
Other Basic Requirements		0-3
Computer Competency		0-3
Major/Concentration Requirements		78

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

#### Integrated Inquiry

##### *Creative and Aesthetic Inquiry*

Select 3 Credits (p. 29) 3

##### *Humanities Inquiry*

Select 3 Credits (p. 29) 3

##### *Social Science Inquiry*

Select 3 Credits (p. 29) 3

##### *Natural Science Inquiry*

SCI 101 Science of Life 3

##### *Physical Science Inquiry*

SCI 102 Understanding the Physical World 3

Subtotal 15

#### Thematic Thread

Select 12 Credits (p. 29) <sup>2</sup> 12

**Total Hours** 42

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.
- <sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

### Major Requirements

- 39 major credits must be taken at SRU or PASSHE
- 39 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Courses</b>		
ART 100	2-D Design <sup>1</sup>	3
ART 101	3-D Design <sup>1</sup>	3
ART 105	Basic Studio Drawing <sup>1</sup>	3
ART 225	Overview of Western Art <sup>1</sup>	3
ART 226	Overview of World Art <sup>1</sup>	3
ART 300	Art Seminar <sup>1</sup>	3
<b>Art History Electives</b>		
Select two of the following:		6
ART 325	North American Art History <sup>1</sup>	
ART 335	The Renaissance Tradition <sup>1</sup>	
ART 345	Foundations of Modern Art <sup>1</sup>	

ART 355	Early Modern Art <sup>1</sup>
ART 365	Art Since 1945 <sup>1</sup>
ART 420	Art History Seminar <sup>1</sup>

**Graphic Design Concentration (15 Credits)**

These courses will count towards BFA Studio requirements. (200-400 level courses are repeatable – see below for course details).

Select 12 credits from the following:

ART 213	Intermediate Studio Graphic Design <sup>1</sup>	0-6
ART 313	Advanced Studio Graphic Design <sup>1</sup>	0-9
ART 413	Senior Studio Graphic Design <sup>1</sup>	0-6

*Graphic Design 1st Concentration Required – Capstone Course*

ART 433	Senior Project Graphic Design	3
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**Additional Studio Requirements***100 Level Electives*

Select three of the following courses, no class may be repeated: 9

ART 106	Basic Studio Painting <sup>1</sup>
ART 107	Basic Studio Photography <sup>1</sup>
ART 108	Basic Studio Printmaking <sup>1</sup>
ART 109	Basic Studio Metalsmithing <sup>1</sup>
ART 110	Basic Studio Sculpture <sup>1</sup>
ART 111	Basic Studio Fiber Art <sup>1</sup>
ART 112	Basic Studio Ceramics <sup>1</sup>
ART 113	Basic Studio Graphic Design <sup>1</sup>
ART 114	Basic Studio Digital Media <sup>1</sup>

*200 Level Electives*

Select four of the following courses, you may take any class twice: 12

ART 205	Intermediate Studio Drawing <sup>1</sup>
ART 206	Intermediate Studio Painting <sup>1</sup>
ART 207	Intermediate Studio Photography <sup>1</sup>
ART 208	Intermediate Studio Printmaking <sup>1</sup>
ART 209	Intermediate Studio Metalsmithing <sup>1</sup>
ART 210	Intermediate Studio Sculpture <sup>1</sup>
ART 211	Intermediate Studio Fiber Art <sup>1</sup>
ART 212	Intermediate Studio Ceramics <sup>1</sup>
ART 213	Intermediate Studio Graphic Design <sup>1</sup>
ART 214	Intermediate Studio Digital Media <sup>1</sup>

*300 Level Electives*

Select four of the following courses, you may take any class up to three times: 12

ART 305	Advanced Studio Drawing <sup>1</sup>
ART 306	Advanced Studio Painting <sup>1</sup>
ART 307	Advanced Studio Photography <sup>1</sup>
ART 308	Advanced Studio Printmaking <sup>1</sup>
ART 309	Advanced Studio Metalsmithing <sup>1</sup>
ART 310	Advanced Studio Sculpture <sup>1</sup>
ART 311	Advanced Studio Fiber Art <sup>1</sup>
ART 312	Advanced Studio Ceramics <sup>1</sup>
ART 313	Advanced Studio Graphic Design <sup>1</sup>
ART 314	Advanced Studio Digital Media <sup>1</sup>

*400 Level Electives*

Select three of the following courses, you may take any class up to two times: 9

ART 405	Senior Studio Drawing <sup>1</sup>
ART 406	Senior Studio Painting <sup>1</sup>
ART 407	Senior Studio Photography <sup>1</sup>
ART 408	Senior Studio Printmaking <sup>1</sup>
ART 409	Senior Studio Metalsmithing <sup>1</sup>
ART 410	Senior Studio Sculpture <sup>1</sup>
ART 411	Senior Studio Fiber Art <sup>1</sup>
ART 412	Senior Studio Ceramics <sup>1</sup>
ART 413	Senior Studio Graphic Design <sup>1</sup>
ART 414	Senior Studio Digital Media <sup>1</sup>

*Art Electives*

Select from 300-400 level courses <sup>1</sup> 9

**Total Hours 78**

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**Co-curricular and Experiential Learning**

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Student leadership development
5. Service opportunities (e.g., Empty Bowls program)
6. Career education and development
7. Internships
8. Student exhibitions
9. Field Experiences

**Important Curriculum Guide Notes**

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

ART - BFA (5305)

Concentration in Graphic Design (GDES)

This program is effective as of Fall 2020.

Revised 03.09.2021

UCC 12.3.2019

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ART 225	Overview of Western Art	3
ART 100	2-D Design	3
ART 105	Basic Studio Drawing	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
ART 101	3-D Design	3
ART 1X X	Basic Studio (Graphic Design Concentration)	3
ART 1XX	Basic Studio	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
POLS 235	Civil Discourse and Democracy	3
Humanities Inquiry (p. 29)		3
Creative & Aesthetic Inquiry (p. 29)		3
ART 1XX	Basic Studio	3
ART 2XX	Intermediate Studio	3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
SCI 102	Understanding the Physical World	3
ART 226	Overview of World Art	3
ART 2XX	Intermediate Studio	3
ART 2XX	Intermediate Studio	3
ART 2XX	Intermediate Studio (Graphic Design Concentration)	3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
SCI 101	Science of Life	3
ART 30X	Art History	3
ART 3XX	Advanced Studio	3
ART 3XX	Advanced Studio	3
ART 30X or 40X ART Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Thematic Thread Requirement (p. 29)		3
Social Science Inquiry (p. 29)		3
ART 3XX	Advanced Studio	3
ART 3XX	Advanced Studio (Graphic Design Concentration)	3
ART 300	Art Seminar	3
<b>Hours</b>		<b>15</b>

### Fourth Year

#### Fall

Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
ART 4XX	Senior Studio	3
ART 4XX	Senior Studio (Graphic Design Concentration)	3
ART 30X or 40X ART Elective		3
<b>Hours</b>		<b>15</b>

#### Spring

ART 3XX	Art History	3
Thematic Thread Requirement (p. 29)		3
ART 30X or 40X Art Elective		3
ART 4xX	Senior Studio	3
ART 4xX	Senior Project (Graphic Design Concentration)	3
Hours		15
Total Hours**		121

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

ART - BFA (5305)

Concentration in Graphic Design (GDES)

Revised: 05.13.2022

## Art, Bachelor of Fine Arts (BFA) - Concentration in K-12 Art Teacher Preparation

Students in the BFA Art program will have the option to elect this concentration and take most of the required coursework as undergraduates at SRU to prepare for certification through Carlow University. BFA Art graduates with this concentration will enroll at Carlow University for a semester of student teaching, and will obtain K-12 Art Teacher Certification through Carlow University.

This concentration can be completed within the current curricular structure of the BFA degree, and with the addition of six College of Education classes. Students are required to take one class (at any level) in most studio art disciplines. See adviser.

This concentration includes all coursework and requirements specified by the Pennsylvania Department of Education, with student teaching and K-12 Art Teacher certification obtained through Carlow University.

Program Learning Outcomes

- **Critical Thinking:** Art majors will locate, analyze and synthesize art historical information and context within their own work.
- **Degree Program Writing Competency:** Students will be able to effectively communicate in writing for purposes of the discipline.
- **Direction:** Art majors develop a personal direction through their choice of medium, idea and/or style. Students will demonstrate intellectual and artistic curiosity while committing to improvement.
- **Professional Proficiency:** Art majors will perceive, discuss and demonstrate professional proficiency upon graduation by applying their knowledge and skills of fine art.
- **Technique:** Art majors will demonstrate technical aptitude. The department assesses the technical quality of student production. Each medium varies with its technical demands.

Related Links

Art - K-12 Teacher Preparation, BFA Program Page (<https://www.sru.edu/academics/majors-and-minors/art-bfa-teacher-preparation/>)

Art Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/art/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

Curriculum Guide

GPA Requirement

Major GPA: 3.0 or higher  
Overall GPA: 3.0 or higher

Summary\*

Code	Title	Hours
Rock Studies 2 Requirements		42
Other Basic Requirements		0-3
Computer Competency		0-3
Major Requirements		78
Concentration Requirements		9

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		

Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Science Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.
- <sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.



## Major Requirements

- 39 major credits must be taken at SRU or PASSHE
- 39 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Courses</b>		
ART 100	2-D Design <sup>1</sup>	3
ART 101	3-D Design <sup>1</sup>	3
ART 105	Basic Studio Drawing <sup>1</sup>	3
ART 225	Overview of Western Art <sup>1</sup>	3
ART 226	Overview of World Art <sup>1</sup>	3
ART 300	Art Seminar <sup>1</sup>	3
Subtotal		18
<b>Electives</b>		
<i>Art History Electives</i>		
Select two of the following:		6
ART 325	North American Art History <sup>1</sup>	
ART 335	The Renaissance Tradition <sup>1</sup>	
ART 345	Foundations of Modern Art <sup>1</sup>	
ART 355	Early Modern Art <sup>1</sup>	
ART 365	Art Since 1945 <sup>1</sup>	
ART 420	Art History Seminar <sup>1</sup>	
<i>100 Level Electives</i>		
Select three of the following courses, no class may be repeated:		9
ART 106	Basic Studio Painting <sup>1</sup>	
ART 107	Basic Studio Photography <sup>1</sup>	
ART 108	Basic Studio Printmaking <sup>1</sup>	
ART 109	Basic Studio Metalsmithing <sup>1</sup>	
ART 110	Basic Studio Sculpture <sup>1</sup>	
ART 111	Basic Studio Fiber Art <sup>1</sup>	
ART 112	Basic Studio Ceramics <sup>1</sup>	
ART 113	Basic Studio Graphic Design <sup>1</sup>	
ART 114	Basic Studio Digital Media <sup>1</sup>	
<i>200 Level Electives</i>		
Select four of the following courses, you may take any class twice:		12
ART 205	Intermediate Studio Drawing <sup>1</sup>	
ART 206	Intermediate Studio Painting <sup>1</sup>	
ART 207	Intermediate Studio Photography <sup>1</sup>	
ART 208	Intermediate Studio Printmaking <sup>1</sup>	
ART 209	Intermediate Studio Metalsmithing <sup>1</sup>	
ART 210	Intermediate Studio Sculpture <sup>1</sup>	
ART 211	Intermediate Studio Fiber Art <sup>1</sup>	
ART 212	Intermediate Studio Ceramics <sup>1</sup>	
ART 213	Intermediate Studio Graphic Design <sup>1</sup>	
ART 214	Intermediate Studio Digital Media <sup>1</sup>	
<i>300 Level Electives</i>		
Select four of the following courses, you may take any class up to three times:		12
ART 305	Advanced Studio Drawing <sup>1</sup>	
ART 306	Advanced Studio Painting <sup>1</sup>	
ART 307	Advanced Studio Photography <sup>1</sup>	
ART 308	Advanced Studio Printmaking <sup>1</sup>	

ART 309	Advanced Studio Metalsmithing <sup>1</sup>	
ART 310	Advanced Studio Sculpture <sup>1</sup>	
ART 311	Advanced Studio Fiber Art <sup>1</sup>	
ART 312	Advanced Studio Ceramics <sup>1</sup>	
ART 313	Advanced Studio Graphic Design <sup>1</sup>	
ART 314	Advanced Studio Digital Media <sup>1</sup>	
<i>400 Level Electives</i>		
Select three of the following courses, you may take any class up to two times:		9
ART 405	Senior Studio Drawing <sup>1</sup>	
ART 406	Senior Studio Painting <sup>1</sup>	
ART 407	Senior Studio Photography <sup>1</sup>	
ART 408	Senior Studio Printmaking <sup>1</sup>	
ART 409	Senior Studio Metalsmithing <sup>1</sup>	
ART 410	Senior Studio Sculpture <sup>1</sup>	
ART 411	Senior Studio Fiber Art <sup>1</sup>	
ART 412	Senior Studio Ceramics <sup>1</sup>	
ART 413	Senior Studio Graphic Design <sup>1</sup>	
ART 414	Senior Studio Digital Media <sup>1</sup>	
<i>SR Project</i>		
Select one of the following: <sup>2</sup>		3
ART 425	Senior Project Drawing <sup>1</sup>	
ART 426	Senior Project Painting <sup>1</sup>	
ART 427	Senior Project Photography <sup>1</sup>	
ART 428	Senior Project Printmaking <sup>1</sup>	
ART 429	Senior Project Metalsmithing <sup>1</sup>	
ART 430	Senior Project Sculpture <sup>1</sup>	
ART 431	Senior Project Fiber Art <sup>1</sup>	
ART 432	Senior Project Ceramics <sup>1</sup>	
ART 433	Senior Project Graphic Design <sup>1</sup>	
ART 434	Senior Project Digital Media <sup>1</sup>	
<i>Art Electives</i>		
Select from 300-400 level courses <sup>1,3</sup>		9
Subtotal		60
<b>Total Hours</b>		<b>78</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA.

<sup>2</sup> 400 level pre-req or permission of instructor.

<sup>3</sup> The Art classes required for PA K-12 Art Teacher Certification can be used as Art Electives.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Concentration Requirements

Code	Title	Hours
<b>Art Education Concentration</b>		
The following four ART classes are required for Art Teacher Certification and also can be used as Art Elective in the BFA Art degree.		
ART 317	Elementary Art Methods and Materials <sup>1</sup>	3
AE 327	Secondary Art Methods & Mat (Carlow)	3
ART 440	Art Education Methods <sup>1,2</sup>	1

ART 451	Art Education Methods Internship <sup>1,2</sup>	2
<b>Total Hours</b>		<b>9</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA.

<sup>2</sup> Taken concurrently.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## PENNSYLVANIA DEPARTMENT OF EDUCATION (PDE) REQUIRED EDUCATION-RELATED COURSES & CANDIDACY FOR CERTIFICATION REVIEW

Code	Title	Hours
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### 1. Pass the following Courses:

SEFE 200	Introduction to Education, Teaching Methods and Field	
SPED 121	Overview of Special Education	

### 2. Candidacy for Certification Review:

*A. At 48 credits and prior to taking upper level education-related coursework, students must pass the Candidacy for Certification on Review and meet minimum PDE requirements. Consult with Adviser.*

*B. Pass the following courses:*

CDEV 248	Human Development and Education	
ENGL 102	Critical Writing	
ENGL 104	Critical Reading	
SEFE 200	Introduction to Education, Teaching Methods and Field	
SPED 121	Overview of Special Education	
MATH	Two MATH Courses	

*C. Complete Field Experiences:*

Stage 1 - Observations

Stage 2 - Explorations

*D. Have a minimum GPA of 3.0*

*E. Pass the PAPA Basic Skills Tests or equivalent.*

*F. Obtain all PA Clearances:*

The Pennsylvania State Police Request for Criminal Records Check (Act 34)

The Federal Criminal History Record (Act 114).

The Child Abuse History Clearance (Act 151).

Complete the Arrest/Conviction Report and Certification (Act 24).

TB Test

### 3. Successfully complete the following courses:

SEFE 326	ELL Strategies and Practice	
SEFE 342	Educational Psychology for Diverse Learners	
SPED 350	Universal Intervention	
SPED 360	Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners	

**4. Before SRU Graduation and student teaching placement (through Carlow University) pass PRAXIS II-Fundamental Subjects Content Knowledge. PRAXIS II-Art Content knowledge is required for K-12 Art Teach Certification through Carlow University.**

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Student leadership development
5. Service opportunities (e.g., Empty Bowls program)
6. Career education and development
7. Internships
8. Student exhibitions
9. Field Experiences

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

ART-BFA (5305)

Concentration in K-12 Art Teacher Preparation (ARTE)

This program is effective as of Fall 2020.

Revised 02.2020

UCC 10.29.2021

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
ART 225	Overview of Western Art	3
ART 100	2-D Design	3
ART 105	Basic Studio Drawing	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>6</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
ART 101	3-D Design	3
ART 1XX	Art Studio 100 Level	3

ART 1XX	Art Studio 100 Level	3
SPED 121	Overview of Special Education <sup>1</sup>	3
<b>Hours</b>		<b>18</b>

**Second Year****Fall**

POLS 235	Civil Discourse and Democracy	3
Humanities Inquiry (p. 29)		3
Creative & Aesthetic Inquiry (p. 29)		3
ART 1XX	Art Studio 100 Level	3
ART 2XX	Art Studio 200 Level	3
SEFE 200	Introduction to Education, Teaching Methods and Field	3
Declare a Thematic Thread <sup>5</sup>		
<b>Hours</b>		<b>18</b>

**Spring**

SCI 102	Understanding the Physical World	3
ART 226	Overview of World Art	3
ART 2XX	Art Studio 200 Level	3
ART 2XX	Art Studio 200 Level	3
ART 2XX	Art Studio 200 Level	3
CDEV 248	Human Development and Education <sup>2</sup>	3
<b>Hours</b>		<b>18</b>

**Third Year****Fall**

SCI 101	Science of Life	3
ART 3XX	Art History 300 Level	3
ART 3XX	Art Studio 300 Level	3
ART 3XX	Art Studio 300 Level	3
Thematic Thread Requirement (p. 29)		3
SEFE 326	ELL Strategies and Practice	3
<b>Hours</b>		<b>18</b>

**Spring**

Thematic Thread Requirement (ED: Second Math Requirement) (p. 29)		3
Social Science Inquiry (p. 29)		3
ART 3XX	Art Studio 300 Level	3
ART 3XX	Art Studio 300 Level	3
ART 300	Art Seminar	3
SPED 350	Universal Intervention <sup>3</sup>	3
<b>Hours</b>		<b>18</b>

**Summer**

*Art Studio Elective (AE 327 Carlow Presession)		3
<b>Hours</b>		<b>3</b>

**Fourth Year****Fall**

Thematic Thread Requirement (p. 29)		3
ART 4XX	Art Studio 400 Level	3
ART 4XX	Art Studio 400 Level	3
ART 317	Elementary Art Methods and Materials	3
ART 451	Art Education Methods Internship	2
ART 440	Art Education Methods	1

SEFE 342	Educational Psychology for Diverse Learners	3
<b>Hours</b>		<b>18</b>

**Spring**

Art History - select one from the following:		3
ART 325	North American Art History	
ART 335	The Renaissance Tradition	
ART 345	Foundations of Modern Art	
ART 355	Early Modern Art	
ART 365	Art Since 1945	
ART 420	Art History Seminar	
Thematic Thread Requirement (p. 29)		3
ART 4XX	Art Studio 400 Level	3
Senior Project - select one from the following:		3
ART 425	Senior Project Drawing	
ART 426	Senior Project Painting	
ART 427	Senior Project Photography	
ART 428	Senior Project Printmaking	
ART 429	Senior Project Metalsmithing	
ART 430	Senior Project Sculpture	
ART 431	Senior Project Fiber Art	
ART 432	Senior Project Ceramics	
ART 433	Senior Project Graphic Design	
ART 434	Senior Project Digital Media	
SPED 360	Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners <sup>4</sup>	3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>142</b>

<sup>1</sup> Stage 1: 20 Hour Observation

<sup>2</sup> Stage 2: 20 hour Observation

<sup>3</sup> Praxis II: 0511 and 5511

<sup>4</sup> Praxis II: Art 0134

<sup>5</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>6</sup> Course offered in multiple subject areas; cannot take in first major subject area.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

ART- BFA (5305)

Concentration in K-12 Art Teacher Preparation (ARTE)

Revised 05.13.2022

# Art, Bachelor of Fine Arts (BFA) - Concentration in Metalsmithing

## Program Learning Outcomes

- **Critical Thinking:** Art majors will locate, analyze and synthesize art historical information and context within their own work.
- **Degree Program Writing Competency:** Students will be able to effectively communicate in writing for purposes of the discipline.
- **Direction:** Art majors develop a personal direction through their choice of medium, idea and/or style. Students will demonstrate intellectual and artistic curiosity while committing to improvement.
- **Professional Proficiency:** Art majors will perceive, discuss and demonstrate professional proficiency upon graduation by applying their knowledge and skills of fine art.
- **Technique:** Art majors will demonstrate technical aptitude. The department assesses the technical quality of student production. Each medium varies with its technical demands.

## Related Links

Art - Metalsmithing, BFA Program Page (<https://www.sru.edu/academics/majors-and-minors/art-bfa-concentration-in-metalsmithing/>)

Art Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/art/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	78

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Science Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 39 major credits must be taken at SRU or PASSHE
- 39 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Courses</b>		
ART 100	2-D Design <sup>1</sup>	3
ART 101	3-D Design <sup>1</sup>	3
ART 105	Basic Studio Drawing <sup>1</sup>	3
ART 225	Overview of Western Art <sup>1</sup>	3
ART 226	Overview of World Art <sup>1</sup>	3
ART 300	Art Seminar <sup>1</sup>	3
<b>Art History Electives</b>		
Select two of the following:		6
ART 325	North American Art History <sup>1</sup>	
ART 335	The Renaissance Tradition <sup>1</sup>	
ART 345	Foundations of Modern Art <sup>1</sup>	
ART 355	Early Modern Art <sup>1</sup>	
ART 365	Art Since 1945 <sup>1</sup>	
ART 420	Art History Seminar <sup>1</sup>	
<b>Metalsmithing Concentration (15 Credits)</b>		
Concentration courses count towards BFA Studio requirements. (200-400 level courses are repeatable – see below for course details).		
Select 12 credits from the following:		
ART 109	Basic Studio Metalsmithing <sup>1</sup>	0-3
ART 209	Intermediate Studio Metalsmithing <sup>1</sup>	0-6
ART 309	Advanced Studio Metalsmithing <sup>1</sup>	0-9
ART 409	Senior Studio Metalsmithing <sup>1</sup>	0-6
<i>Metalsmithing 1st Concentration Required – Capstone Course</i>		
ART 429	Senior Project Metalsmithing <sup>1</sup>	3
<b>Additional Studio Requirements</b>		
<b>100 Level Electives</b>		
Select three of the following courses, no class may be repeated:		9
ART 106	Basic Studio Painting <sup>1</sup>	
ART 107	Basic Studio Photography <sup>1</sup>	
ART 108	Basic Studio Printmaking <sup>1</sup>	
ART 109	Basic Studio Metalsmithing <sup>1</sup>	
ART 110	Basic Studio Sculpture <sup>1</sup>	
ART 111	Basic Studio Fiber Art <sup>1</sup>	
ART 112	Basic Studio Ceramics <sup>1</sup>	
ART 113	Basic Studio Graphic Design <sup>1</sup>	
<b>200 Level Electives</b>		
Select four of the following courses, you may take any class twice:		12
ART 205	Intermediate Studio Drawing <sup>1</sup>	
ART 206	Intermediate Studio Painting <sup>1</sup>	
ART 207	Intermediate Studio Photography <sup>1</sup>	
ART 208	Intermediate Studio Printmaking <sup>1</sup>	
ART 209	Intermediate Studio Metalsmithing <sup>1</sup>	
ART 210	Intermediate Studio Sculpture <sup>1</sup>	
ART 211	Intermediate Studio Fiber Art <sup>1</sup>	
ART 212	Intermediate Studio Ceramics <sup>1</sup>	

ART 213	Intermediate Studio Graphic Design <sup>1</sup>	
ART 214	Intermediate Studio Digital Media <sup>1</sup>	
300 Level Electives		
Select four of the following courses, you may take any class up to three times:		12
ART 305	Advanced Studio Drawing <sup>1</sup>	
ART 306	Advanced Studio Painting <sup>1</sup>	
ART 307	Advanced Studio Photography <sup>1</sup>	
ART 308	Advanced Studio Printmaking <sup>1</sup>	
ART 309	Advanced Studio Metalsmithing <sup>1</sup>	
ART 310	Advanced Studio Sculpture <sup>1</sup>	
ART 311	Advanced Studio Fiber Art <sup>1</sup>	
ART 312	Advanced Studio Ceramics <sup>1</sup>	
ART 313	Advanced Studio Graphic Design <sup>1</sup>	
ART 314	Advanced Studio Digital Media <sup>1</sup>	
400 Level Electives		
Select three of the following courses, you may take any class up to two times:		9
ART 405	Senior Studio Drawing <sup>1</sup>	
ART 406	Senior Studio Painting <sup>1</sup>	
ART 407	Senior Studio Photography <sup>1</sup>	
ART 408	Senior Studio Printmaking <sup>1</sup>	
ART 409	Senior Studio Metalsmithing <sup>1</sup>	
ART 410	Senior Studio Sculpture <sup>1</sup>	
ART 411	Senior Studio Fiber Art <sup>1</sup>	
ART 412	Senior Studio Ceramics <sup>1</sup>	
ART 413	Senior Studio Graphic Design <sup>1</sup>	
ART 414	Senior Studio Digital Media <sup>1</sup>	
Art Electives		
Select from 300-400 level courses <sup>1</sup>		9
Total Hours		78

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Student leadership development
5. Service opportunities (e.g., Empty Bowls program)
6. Career education and development
7. Internships
8. Student exhibitions
9. Field Experiences



## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

ART - BFA (5305)

Concentration in Metalsmithing (METL)

This program is effective as of Fall 2020.

Revised 03.09.2021

UCC 12.3.2019

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ART 225	Overview of Western Art	3
ART 100	2-D Design	3
ART 105	Basic Studio Drawing	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
ART 101	3-D Design	3
ART 1X X	Basic Studio (Metalsmithing Concentration)	3
ART 1XX	Basic Studio	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
POLS 235	Civil Discourse and Democracy	3
Humanities Inquiry (p. 29)		3
Creative & Aesthetic Inquiry (p. 29)		3
ART 1XX	Basic Studio	3
ART 2XX	Intermediate Studio	3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
SCI 102	Understanding the Physical World	3
ART 226	Overview of World Art	3
ART 2XX	Intermediate Studio	3
ART 2XX	Intermediate Studio	3
ART 2XX	Intermediate Studio (Metalsmithing Concentration)	3
<b>Hours</b>		<b>15</b>

### Third Year

#### Fall

SCI 101	Science of Life	3
ART 30X	Art History	3
ART 3XX	Advanced Studio	3
ART 3XX	Advanced Studio	3
ART 30X or 40X ART Elective		3
<b>Hours</b>		<b>15</b>

#### Spring

Thematic Thread Requirement (p. 29)		3
Social Science Inquiry (p. 29)		3
ART 3XX	Advanced Studio	3
ART 3XX	Advanced Studio (Metalsmithing Concentration)	3
ART 300	Art Seminar	3
<b>Hours</b>		<b>15</b>

### Fourth Year

#### Fall

Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
ART 4XX	Senior Studio	3
ART 4XX	Senior Studio (Metalsmithing Concentration)	3
ART 30X or 40X ART Elective		3
<b>Hours</b>		<b>15</b>

#### Spring

ART 30X	Art History	3
Thematic Thread Requirement (p. 29)		3
ART 30X or 40X Art Elective		3
ART 4xX	Senior Studio	3
ART 4xX	Senior Project (Metalsmithing Concentration)	3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

ART - BFA (5305)

Concentration in Metalsmithing (METL)

Revised: 05.13.2022

# Art, Bachelor of Fine Arts (BFA) - Concentration in Painting

## Program Learning Outcomes

- **Critical Thinking:** Art majors will locate, analyze and synthesize art historical information and context within their own work.
- **Degree Program Writing Competency:** Students will be able to effectively communicate in writing for purposes of the discipline.
- **Direction:** Art majors develop a personal direction through their choice of medium, idea and/or style. Students will demonstrate intellectual and artistic curiosity while committing to improvement.
- **Professional Proficiency:** Art majors will perceive, discuss and demonstrate professional proficiency upon graduation by applying their knowledge and skills of fine art.
- **Technique:** Art majors will demonstrate technical aptitude. The department assesses the technical quality of student production. Each medium varies with its technical demands.

## Related Links

Art - Painting, BFA Program Page (<https://www.sru.edu/academics/majors-and-minors/art-bfa-painting/>)

Art Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/art/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	78

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Science Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 39 major credits must be taken at SRU or PASSHE
- 39 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Courses</b>		
ART 100	2-D Design <sup>1</sup>	3
ART 101	3-D Design <sup>1</sup>	3
ART 105	Basic Studio Drawing <sup>1</sup>	3
ART 225	Overview of Western Art <sup>1</sup>	3
ART 226	Overview of World Art <sup>1</sup>	3
ART 300	Art Seminar <sup>1</sup>	3
<b>Art History Electives</b>		
Select two of the following:		6
ART 325	North American Art History <sup>1</sup>	
ART 335	The Renaissance Tradition <sup>1</sup>	
ART 345	Foundations of Modern Art <sup>1</sup>	
ART 355	Early Modern Art <sup>1</sup>	
ART 365	Art Since 1945 <sup>1</sup>	
ART 420	Art History Seminar <sup>1</sup>	
<b>Painting Concentration (15 Credits)</b>		
Concentration courses count towards BFA Studio requirements. (200-400 level courses are repeatable – see below for course details).		
Select 12 credits from the following:		
ART 106	Basic Studio Painting <sup>1</sup>	0-3
ART 206	Intermediate Studio Painting <sup>1</sup>	0-6
ART 306	Advanced Studio Painting <sup>1</sup>	0-9
ART 406	Senior Studio Painting <sup>1</sup>	0-6
<i>Painting 1st Concentration Required – Capstone Course</i>		
ART 426	Senior Project Painting <sup>1</sup>	3
<b>Additional Studio Requirements</b>		
<b>100 Level Electives</b>		
Select three of the following courses, no class may be repeated:		9
ART 106	Basic Studio Painting <sup>1</sup>	
ART 107	Basic Studio Photography <sup>1</sup>	
ART 108	Basic Studio Printmaking <sup>1</sup>	
ART 109	Basic Studio Metalsmithing <sup>1</sup>	
ART 110	Basic Studio Sculpture <sup>1</sup>	
ART 111	Basic Studio Fiber Art <sup>1</sup>	
ART 112	Basic Studio Ceramics <sup>1</sup>	
ART 113	Basic Studio Graphic Design <sup>1</sup>	
<b>200 Level Electives</b>		
Select four of the following courses, you may take any class twice:		12
ART 205	Intermediate Studio Drawing <sup>1</sup>	
ART 206	Intermediate Studio Painting <sup>1</sup>	
ART 207	Intermediate Studio Photography <sup>1</sup>	
ART 208	Intermediate Studio Printmaking <sup>1</sup>	
ART 209	Intermediate Studio Metalsmithing <sup>1</sup>	
ART 210	Intermediate Studio Sculpture <sup>1</sup>	
ART 211	Intermediate Studio Fiber Art <sup>1</sup>	
ART 212	Intermediate Studio Ceramics <sup>1</sup>	

ART 213	Intermediate Studio Graphic Design <sup>1</sup>
ART 214	Intermediate Studio Digital Media <sup>1</sup>
<b>300 Level Electives</b>	
Select four of the following courses, you may take any class up to three times:	
ART 305	Advanced Studio Drawing <sup>1</sup>
ART 306	Advanced Studio Painting <sup>1</sup>
ART 307	Advanced Studio Photography <sup>1</sup>
ART 308	Advanced Studio Printmaking <sup>1</sup>
ART 309	Advanced Studio Metalsmithing <sup>1</sup>
ART 310	Advanced Studio Sculpture <sup>1</sup>
ART 311	Advanced Studio Fiber Art <sup>1</sup>
ART 312	Advanced Studio Ceramics <sup>1</sup>
ART 313	Advanced Studio Graphic Design <sup>1</sup>
ART 314	Advanced Studio Digital Media <sup>1</sup>
<b>400 Level Electives</b>	
Select three of the following courses, you may take any class up to two times:	
ART 405	Senior Studio Drawing <sup>1</sup>
ART 406	Senior Studio Painting <sup>1</sup>
ART 407	Senior Studio Photography <sup>1</sup>
ART 408	Senior Studio Printmaking <sup>1</sup>
ART 409	Senior Studio Metalsmithing <sup>1</sup>
ART 410	Senior Studio Sculpture <sup>1</sup>
ART 411	Senior Studio Fiber Art <sup>1</sup>
ART 412	Senior Studio Ceramics <sup>1</sup>
ART 413	Senior Studio Graphic Design <sup>1</sup>
ART 414	Senior Studio Digital Media <sup>1</sup>
<b>Art Electives</b>	
Select from 300-400 level courses <sup>1</sup>	
<b>Total Hours</b>	

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Student leadership development
5. Service opportunities (e.g., Empty Bowls program)
6. Career education and development
7. Internships
8. Student exhibitions
9. Field Experiences

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

ART - BFA (5305)

Concentration in Painting (PNTG)

This program is effective as of Fall 2020.

Revised 03.09.2021

UCC 12.3.2019

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ART 100	2-D Design	3
ART 105	Basic Studio Drawing	3
ART 225	Overview of Western Art	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
ART 101	3-D Design	3
ART 1X X	Basic Studio (Painting Concentration)	3
ART 1XX	Basic Studio	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
POLS 235	Civil Discourse and Democracy	3
Humanities Inquiry (p. 29)		3
Creative & Aesthetic Inquiry (p. 29)		3
ART 1XX	Basic Studio	3
ART 2XX	Intermediate Studio	3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
SCI 102	Understanding the Physical World	3
ART 226	Overview of World Art	3
ART 2XX	Intermediate Studio	3
ART 2XX	Intermediate Studio	3
ART 2XX	Intermediate Studio (Painting Concentration)	3
<b>Hours</b>		<b>15</b>

### Third Year

#### Fall

SCI 101	Science of Life	3
ART 30X	Art History	3
ART 3XX	Advanced Studio	3
ART 3XX	Advanced Studio	3
ART 30X or 40X ART Elective		3
<b>Hours</b>		<b>15</b>

#### Spring

Thematic Thread Requirement (p. 29)		3
Social Science Inquiry (p. 29)		3
ART 3XX	Advanced Studio	3
ART 3XX	Advanced Studio (Painting Concentration)	3
ART 300	Art Seminar	3
<b>Hours</b>		<b>15</b>

### Fourth Year

#### Fall

Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
ART 4XX	Senior Studio	3
ART 4XX	Senior Studio (Painting Concentration)	3
ART 30X or 40X ART Elective		3
<b>Hours</b>		<b>15</b>

#### Spring

ART 3XX	Art History	3
Thematic Thread Requirement (p. 29)		3
ART 30X or 40X Art Elective		3
ART 4xX	Senior Studio	3
ART 4xX	Senior Project (Painting Concentration)	3
<b>Hours</b>		<b>15</b>

**Total Hours\*\* 121**

<sup>1</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>2</sup> Course offered in multiple subjects; cannot take course in first major subject.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

ART - BFA (5305)

Concentration in Painting (PNTG)

Revised: 05.13.2022

# Art, Bachelor of Fine Arts (BFA) - Concentration in Photography

## Program Learning Outcomes

- **Critical Thinking:** Art majors will locate, analyze and synthesize art historical information and context within their own work.
- **Degree Program Writing Competency:** Students will be able to effectively communicate in writing for purposes of the discipline.
- **Direction:** Art majors develop a personal direction through their choice of medium, idea and/or style. Students will demonstrate intellectual and artistic curiosity while committing to improvement.
- **Professional Proficiency:** Art majors will perceive, discuss and demonstrate professional proficiency upon graduation by applying their knowledge and skills of fine art.
- **Technique:** Art majors will demonstrate technical aptitude. The department assesses the technical quality of student production. Each medium varies with its technical demands.

## Related Links

Art - Photography, BFA Program Page (<https://www.sru.edu/academics/majors-and-minors/art-bfa-photography/>)

Art Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/art/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	78

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 12 Credits (p. 29)		3
<i>Natural Science Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.



## Major Requirements

- 39 major credits must be taken at SRU or PASSHE
- 39 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Courses</b>		
ART 100	2-D Design <sup>1</sup>	3
ART 101	3-D Design <sup>1</sup>	3
ART 105	Basic Studio Drawing <sup>1</sup>	3
ART 225	Overview of Western Art <sup>1</sup>	3
ART 226	Overview of World Art <sup>1</sup>	3
ART 300	Art Seminar <sup>1</sup>	3
<b>Art History Electives</b>		
Select two of the following:		6
ART 325	North American Art History <sup>1</sup>	
ART 335	The Renaissance Tradition <sup>1</sup>	
ART 345	Foundations of Modern Art <sup>1</sup>	
ART 355	Early Modern Art <sup>1</sup>	
ART 365	Art Since 1945 <sup>1</sup>	
ART 420	Art History Seminar <sup>1</sup>	
<b>Photography Concentration (15 Credits)</b>		
Concentration courses count towards BFA Studio requirements. (200-400 level courses are repeatable – see below for course details).		
Select 12 credits from the following:		
ART 107	Basic Studio Photography <sup>1</sup>	0-3
ART 207	Intermediate Studio Photography <sup>1</sup>	0-6
ART 307	Advanced Studio Photography <sup>1</sup>	0-9
ART 407	Senior Studio Photography <sup>1</sup>	0-6
<i>Photography 1st Concentration Required – Capstone Course</i>		
ART 427	Senior Project Photography <sup>1</sup>	3
<b>Additional Studio Requirements</b>		
<b>100 Level Electives</b>		
Select three of the following courses, no class may be repeated:		9
ART 106	Basic Studio Painting <sup>1</sup>	
ART 107	Basic Studio Photography <sup>1</sup>	
ART 108	Basic Studio Printmaking <sup>1</sup>	
ART 109	Basic Studio Metalsmithing <sup>1</sup>	
ART 110	Basic Studio Sculpture <sup>1</sup>	
ART 111	Basic Studio Fiber Art <sup>1</sup>	
ART 112	Basic Studio Ceramics <sup>1</sup>	
ART 113	Basic Studio Graphic Design <sup>1</sup>	
<b>200 Level Electives</b>		
Select four of the following courses, you may take any class twice:		12
ART 205	Intermediate Studio Drawing <sup>1</sup>	
ART 206	Intermediate Studio Painting <sup>1</sup>	
ART 207	Intermediate Studio Photography <sup>1</sup>	
ART 208	Intermediate Studio Printmaking <sup>1</sup>	
ART 209	Intermediate Studio Metalsmithing <sup>1</sup>	
ART 210	Intermediate Studio Sculpture <sup>1</sup>	
ART 211	Intermediate Studio Fiber Art <sup>1</sup>	
ART 212	Intermediate Studio Ceramics <sup>1</sup>	

ART 213	Intermediate Studio Graphic Design <sup>1</sup>
ART 214	Intermediate Studio Digital Media <sup>1</sup>
<b>300 Level Electives</b>	
Select four of the following courses, you may take any class up to three times:	
ART 305	Advanced Studio Drawing <sup>1</sup>
ART 306	Advanced Studio Painting <sup>1</sup>
ART 307	Advanced Studio Photography <sup>1</sup>
ART 308	Advanced Studio Printmaking <sup>1</sup>
ART 309	Advanced Studio Metalsmithing <sup>1</sup>
ART 310	Advanced Studio Sculpture <sup>1</sup>
ART 311	Advanced Studio Fiber Art <sup>1</sup>
ART 312	Advanced Studio Ceramics <sup>1</sup>
ART 313	Advanced Studio Graphic Design <sup>1</sup>
ART 314	Advanced Studio Digital Media <sup>1</sup>
<b>400 Level Electives</b>	
Select three of the following courses, you may take any class up to two times:	
ART 405	Senior Studio Drawing <sup>1</sup>
ART 406	Senior Studio Painting <sup>1</sup>
ART 407	Senior Studio Photography <sup>1</sup>
ART 408	Senior Studio Printmaking <sup>1</sup>
ART 409	Senior Studio Metalsmithing <sup>1</sup>
ART 410	Senior Studio Sculpture <sup>1</sup>
ART 411	Senior Studio Fiber Art <sup>1</sup>
ART 412	Senior Studio Ceramics <sup>1</sup>
ART 413	Senior Studio Graphic Design <sup>1</sup>
ART 414	Senior Studio Digital Media <sup>1</sup>
<b>Art Electives</b>	
Select from 300-400 level courses <sup>1</sup>	
<b>Total Hours</b>	

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Student leadership development
5. Service opportunities (e.g., Empty Bowls program)
6. Career education and development
7. Internships
8. Student exhibitions
9. Field Experiences

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

ART - BFA (5305)

Concentration in Photography (PHOT)

This program is effective as of Fall 2020.

Revised 03.09.2021

UCC 12.3.2019

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ART 225	Overview of Western Art	3
ART 100	2-D Design	3
ART 105	Basic Studio Drawing	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
ART 101	3-D Design	3
ART 1X X	Basic Studio (Photography Concentration)	3
ART 1XX	Basic Studio	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
POLS 235	Civil Discourse and Democracy	3
Humanities Inquiry (p. 29)		3
Creative & Aesthetic Inquiry (p. 29)		3
ART 1XX	Basic Studio	3
ART 2XX	Intermediate Studio	3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
SCI 102	Understanding the Physical World	3
ART 226	Overview of World Art	3
ART 2XX	Intermediate Studio	3
ART 2XX	Intermediate Studio	3
ART 2XX	Intermediate Studio (Photography Concentration)	3
<b>Hours</b>		<b>15</b>

### Third Year

#### Fall

SCI 101	Science of Life	3
ART 30X	Art History	3
ART 3XX	Advanced Studio	3
ART 3XX	Advanced Studio	3
ART 30X or 40X ART Elective		3
<b>Hours</b>		<b>15</b>

#### Spring

Thematic Thread Requirement (p. 29)		3
Social Science Inquiry (p. 29)		3
ART 3XX	Advanced Studio	3
ART 3XX	Advanced Studio (Photography Concentration)	3
ART 300	Art Seminar	3
<b>Hours</b>		<b>15</b>

### Fourth Year

#### Fall

Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
ART 4XX	Senior Studio	3
ART 4XX	Senior Studio (Photography Concentration)	3
ART 30X or 40X ART Elective		3
<b>Hours</b>		<b>15</b>

#### Spring

ART 3XX	Art History	3
Thematic Thread Requirement (p. 29)		3
ART 30X or 40X Art Elective		3
ART 4xX	Senior Studio	3
ART 4xX	Senior Project (Photography Concentration)	3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

ART - BFA (5305)

Concentration in Photography (PHOT)

Revised: 05.13.2022

# Art, Bachelor of Fine Arts (BFA) - Concentration in Printmaking

## Program Learning Outcomes

- **Critical Thinking:** Art majors will locate, analyze and synthesize art historical information and context within their own work.
- **Degree Program Writing Competency:** Students will be able to effectively communicate in writing for purposes of the discipline.
- **Direction:** Art majors develop a personal direction through their choice of medium, idea and/or style. Students will demonstrate intellectual and artistic curiosity while committing to improvement.
- **Professional Proficiency:** Art majors will perceive, discuss and demonstrate professional proficiency upon graduation by applying their knowledge and skills of fine art.
- **Technique:** Art majors will demonstrate technical aptitude. The department assesses the technical quality of student production. Each medium varies with its technical demands.

## Related Links

Art - Printmaking, BFA Program Page (<https://www.sru.edu/academics/majors-and-minors/art-bfa-printmaking/>)

Art Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/art/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	78

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Science Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 39 major credits must be taken at SRU or PASSHE
- 39 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Courses</b>		
ART 100	2-D Design <sup>1</sup>	3
ART 101	3-D Design <sup>1</sup>	3
ART 105	Basic Studio Drawing <sup>1</sup>	3
ART 225	Overview of Western Art <sup>1</sup>	3
ART 226	Overview of World Art <sup>1</sup>	3
ART 300	Art Seminar <sup>1</sup>	3
<b>Art History Electives</b>		
Select two of the following:		6
ART 325	North American Art History <sup>1</sup>	
ART 335	The Renaissance Tradition <sup>1</sup>	
ART 345	Foundations of Modern Art <sup>1</sup>	
ART 355	Early Modern Art <sup>1</sup>	
ART 365	Art Since 1945 <sup>1</sup>	
ART 420	Art History Seminar <sup>1</sup>	
<b>Printmaking Concentration (15 Credits)</b>		
Concentration courses count towards BFA Studio requirements. (200-400 level courses are repeatable – see below for course details).		
Select 12 credits from the following:		
ART 108	Basic Studio Printmaking <sup>1</sup>	0-3
ART 208	Intermediate Studio Printmaking <sup>1</sup>	0-6
ART 308	Advanced Studio Printmaking <sup>1</sup>	0-9
ART 408	Senior Studio Printmaking <sup>1</sup>	0-6
<i>Printmaking 1st Concentration Required – Capstone Course</i>		
ART 428	Senior Project Printmaking	3
<b>Additional Studio Requirements</b>		
<b>100 Level Electives</b>		
Select three of the following courses, no class may be repeated:		9
ART 106	Basic Studio Painting <sup>1</sup>	
ART 107	Basic Studio Photography <sup>1</sup>	
ART 108	Basic Studio Printmaking <sup>1</sup>	
ART 109	Basic Studio Metalsmithing <sup>1</sup>	
ART 110	Basic Studio Sculpture <sup>1</sup>	
ART 111	Basic Studio Fiber Art <sup>1</sup>	
ART 112	Basic Studio Ceramics <sup>1</sup>	
ART 113	Basic Studio Graphic Design <sup>1</sup>	
<b>200 Level Electives</b>		
Select four of the following courses, you may take any class twice:		12
ART 205	Intermediate Studio Drawing <sup>1</sup>	
ART 206	Intermediate Studio Painting <sup>1</sup>	
ART 207	Intermediate Studio Photography <sup>1</sup>	
ART 208	Intermediate Studio Printmaking <sup>1</sup>	
ART 209	Intermediate Studio Metalsmithing <sup>1</sup>	
ART 210	Intermediate Studio Sculpture <sup>1</sup>	
ART 211	Intermediate Studio Fiber Art <sup>1</sup>	
ART 212	Intermediate Studio Ceramics <sup>1</sup>	

ART 213	Intermediate Studio Graphic Design <sup>1</sup>	
ART 214	Intermediate Studio Digital Media <sup>1</sup>	
300 Level Electives		
Select four of the following courses, you may take any class up to three times:		12
ART 305	Advanced Studio Drawing <sup>1</sup>	
ART 306	Advanced Studio Painting <sup>1</sup>	
ART 307	Advanced Studio Photography <sup>1</sup>	
ART 308	Advanced Studio Printmaking <sup>1</sup>	
ART 309	Advanced Studio Metalsmithing <sup>1</sup>	
ART 310	Advanced Studio Sculpture <sup>1</sup>	
ART 311	Advanced Studio Fiber Art <sup>1</sup>	
ART 312	Advanced Studio Ceramics <sup>1</sup>	
ART 313	Advanced Studio Graphic Design <sup>1</sup>	
ART 314	Advanced Studio Digital Media <sup>1</sup>	
400 Level Electives		
Select three of the following courses, you may take any class up to two times:		9
ART 405	Senior Studio Drawing <sup>1</sup>	
ART 406	Senior Studio Painting <sup>1</sup>	
ART 407	Senior Studio Photography <sup>1</sup>	
ART 408	Senior Studio Printmaking <sup>1</sup>	
ART 409	Senior Studio Metalsmithing <sup>1</sup>	
ART 410	Senior Studio Sculpture <sup>1</sup>	
ART 411	Senior Studio Fiber Art <sup>1</sup>	
ART 412	Senior Studio Ceramics <sup>1</sup>	
ART 413	Senior Studio Graphic Design <sup>1</sup>	
ART 414	Senior Studio Digital Media <sup>1</sup>	
Art Electives		
Select from 300-400 level courses <sup>1</sup>		9
Total Hours		78

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Student leadership development
5. Service opportunities (e.g., Empty Bowls program)
6. Career education and development
7. Internships
8. Student exhibitions
9. Field Experiences

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

ART - BFA (5305)

Concentration in Printmaking (PRNT)

This program is effective as of Fall 2020.

Revised 03.09.2021

UCC 12.3.2019

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ART 225	Overview of Western Art	3
ART 100	2-D Design	3
ART 105	Basic Studio Drawing	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
ART 101	3-D Design	3
ART 1X X	Basic Studio (Printmaking Concentration)	3
ART 1XX	Basic Studio	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
POLS 235	Civil Discourse and Democracy	3
Humanities Inquiry (p. 29)		3
Creative & Aesthetic Inquiry (p. 29)		3
ART 1XX	Basic Studio	3
ART 2XX	Intermediate Studio	3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
SCI 102	Understanding the Physical World	3
ART 226	Overview of World Art	3
ART 2XX	Intermediate Studio	3
ART 2XX	Intermediate Studio	3
ART 2XX	Intermediate Studio (Printmaking Concentration)	3
<b>Hours</b>		<b>15</b>

### Third Year

#### Fall

SCI 101	Science of Life	3
ART 30X	Art History	3
ART 3XX	Advanced Studio	3
ART 3XX	Advanced Studio	3
ART 30X or 40X ART Elective		3
<b>Hours</b>		<b>15</b>

#### Spring

Thematic Thread Requirement (p. 29)		3
Social Science Inquiry (p. 29)		3
ART 3XX	Advanced Studio	3
ART 3XX	Advanced Studio (Printmaking Concentration)	3
ART 300	Art Seminar	3
<b>Hours</b>		<b>15</b>

### Fourth Year

#### Fall

Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
ART 4XX	Senior Studio	3
ART 4XX	Senior Studio (Printmaking Concentration)	3
ART 30X or 40X ART Elective		3
<b>Hours</b>		<b>15</b>

#### Spring

ART 3XX	Art History	3
Thematic Thread Requirement (p. 29)		3
ART 30X or 40X Art Elective		3
ART 4xX	Senior Studio	3
ART 4xX	Senior Project (Printmaking Concentration)	3
<b>Hours</b>		<b>15</b>

**Total Hours\*\* 121**

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

ART - BFA (5305)

Concentration in Printmaking (PRNT)

Revised: 05.13.2022



# Art, Bachelor of Fine Arts (BFA) - Concentration in Psychology

## Program Learning Outcomes

- **Critical Thinking:** Art majors will locate, analyze and synthesize art historical information and context within their own work.
- **Degree Program Writing Competency:** Students will be able to effectively communicate in writing for purposes of the discipline.
- **Direction:** Art majors develop a personal direction through their choice of medium, idea and/or style. Students will demonstrate intellectual and artistic curiosity while committing to improvement.
- **Professional Proficiency:** Art majors will perceive, discuss and demonstrate professional proficiency upon graduation by applying their knowledge and skills of fine art.
- **Technique:** Art majors will demonstrate technical aptitude. The department assesses the technical quality of student production. Each medium varies with its technical demands.

## Related Links

Art - Psychology, BFA Program Page ([https://www.sru.edu/academics/majors-and-minors/art-bfa-psychology-\(pre-art-therapy\)/](https://www.sru.edu/academics/majors-and-minors/art-bfa-psychology-(pre-art-therapy)/))

Art Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/art/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

The Art BFA with a Concentration in Psychology gives Bachelor of Fine Arts majors the option to declare a concentration in Psychology. The program will serve as a preparation for Art Therapy Graduate programs.

## Curriculum Guide

### GPA Requirement

Major GPA: 2.00 or higher  
Overall GPA: 2.00 or higher  
2.00 or higher in Psychology

### Summary\*

Code	Title	Hours
Rock Studies 2 Requirements		42
Other Basic Requirements		0-3
Computer Competency		0-3
Major Requirements		78
Concentration Requirements		15

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3

Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Science Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15

### Thematic Thread

Select 12 Credits (p. 29) <sup>2</sup>		12
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<b>Total Hours</b>	<b>42</b>
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- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.
- <sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

### Major Requirements

- 39 major credits must be taken at SRU or PASSHE
- 39 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Courses</b>		
ART 100	2-D Design <sup>1</sup>	3
ART 101	3-D Design <sup>1</sup>	3
ART 105	Basic Studio Drawing <sup>1</sup>	3
ART 225	Overview of Western Art <sup>1</sup>	3
ART 226	Overview of World Art <sup>1</sup>	3
ART 300	Art Seminar <sup>1</sup>	3
Subtotal		18
<b>Art History Electives</b>		
Select two of the following:		6
ART 325	North American Art History <sup>1</sup>	
ART 335	The Renaissance Tradition <sup>1</sup>	
ART 345	Foundations of Modern Art <sup>1</sup>	
ART 355	Early Modern Art <sup>1</sup>	
ART 365	Art Since 1945 <sup>1</sup>	
ART 420	Art History Seminar <sup>1</sup>	
Subtotal		6
<b>100 Level Electives</b>		
Select three of the following courses, no class may be repeated:		9
ART 106	Basic Studio Painting <sup>1</sup>	
ART 107	Basic Studio Photography <sup>1</sup>	
ART 108	Basic Studio Printmaking <sup>1</sup>	
ART 109	Basic Studio Metalsmithing <sup>1</sup>	
ART 110	Basic Studio Sculpture <sup>1</sup>	
ART 111	Basic Studio Fiber Art <sup>1</sup>	
ART 112	Basic Studio Ceramics <sup>1</sup>	
ART 113	Basic Studio Graphic Design <sup>1</sup>	
ART 114	Basic Studio Digital Media <sup>1</sup>	
Subtotal		9
<b>200 Level Electives</b>		
Select four of the following courses, you may take any class twice:		12
ART 205	Intermediate Studio Drawing <sup>1</sup>	
ART 206	Intermediate Studio Painting <sup>1</sup>	
ART 207	Intermediate Studio Photography <sup>1</sup>	
ART 208	Intermediate Studio Printmaking <sup>1</sup>	
ART 209	Intermediate Studio Metalsmithing <sup>1</sup>	
ART 210	Intermediate Studio Sculpture <sup>1</sup>	
ART 211	Intermediate Studio Fiber Art <sup>1</sup>	
ART 212	Intermediate Studio Ceramics <sup>1</sup>	
ART 213	Intermediate Studio Graphic Design <sup>1</sup>	
ART 214	Intermediate Studio Digital Media <sup>1</sup>	
Subtotal		12

### 300 Level Electives

Select four of the following courses, you may take any class up to three times:		12
ART 305	Advanced Studio Drawing <sup>1</sup>	
ART 306	Advanced Studio Painting <sup>1</sup>	
ART 307	Advanced Studio Photography <sup>1</sup>	
ART 308	Advanced Studio Printmaking <sup>1</sup>	
ART 309	Advanced Studio Metalsmithing <sup>1</sup>	
ART 310	Advanced Studio Sculpture <sup>1</sup>	
ART 311	Advanced Studio Fiber Art <sup>1</sup>	
ART 312	Advanced Studio Ceramics <sup>1</sup>	
ART 313	Advanced Studio Graphic Design <sup>1</sup>	
ART 314	Advanced Studio Digital Media <sup>1</sup>	
Subtotal		12

### 400 Level Electives

Select three of the following courses, you may take any class up to two times:		9
ART 405	Senior Studio Drawing <sup>1</sup>	
ART 406	Senior Studio Painting <sup>1</sup>	
ART 407	Senior Studio Photography <sup>1</sup>	
ART 408	Senior Studio Printmaking <sup>1</sup>	
ART 409	Senior Studio Metalsmithing <sup>1</sup>	
ART 410	Senior Studio Sculpture <sup>1</sup>	
ART 411	Senior Studio Fiber Art <sup>1</sup>	
ART 412	Senior Studio Ceramics <sup>1</sup>	
ART 413	Senior Studio Graphic Design <sup>1</sup>	
ART 414	Senior Studio Digital Media <sup>1</sup>	
Subtotal		9

### SR Project

Select one of the following:		3
ART 425	Senior Project Drawing <sup>1,2</sup>	
ART 426	Senior Project Painting <sup>1,2</sup>	
ART 427	Senior Project Photography <sup>1,2</sup>	
ART 428	Senior Project Printmaking <sup>1,2</sup>	
ART 429	Senior Project Metalsmithing <sup>1,2</sup>	
ART 430	Senior Project Sculpture <sup>1,2</sup>	
ART 431	Senior Project Fiber Art <sup>1,2</sup>	
ART 432	Senior Project Ceramics <sup>1,2</sup>	
ART 433	Senior Project Graphic Design <sup>1,2</sup>	
ART 434	Senior Project Digital Media <sup>1,2</sup>	
Subtotal		3

### Art Electives

Select from 300-400 level courses <sup>1</sup>		9
Subtotal		9

<b>Total Hours</b>	<b>78</b>
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<sup>1</sup> Course counts for 50% of Major requirements and Major GPA.

<sup>2</sup> 400 level pre-req or permission of instructor.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Concentration Requirements

Code	Title	Hours
<b>Psychology Concentration</b>		
PSYC 105	Introduction to Psychology <sup>1,2</sup>	3
PSYC 244	Developmental Psychology <sup>1,2</sup>	3
PSYC 276	Introduction to Abnormal Psychology <sup>1,2</sup>	3
PSYC 208	Personality <sup>1,2</sup>	3
Select one of the following:		3
PSYC 205	Environmental Psychology <sup>1,2</sup>	
PSYC 233	Sensation & Perception <sup>1,2</sup>	
PSYC 240	Human Sexual Behavior <sup>1,2</sup>	
PSYC 300	Psychology of Women, Gender and Culture <sup>1,2</sup>	
PSYC 315	Psychology of Sexual and Gender Diversity <sup>1,2</sup>	
PSYC 377	Social Psychology <sup>1,2</sup>	
Subtotal		15
<b>Total Hours</b>		<b>15</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA.

<sup>2</sup> Grade C or higher required.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Student leadership development
5. Service opportunities (e.g., Empty Bowls program)
6. Career education and development
7. Internships
8. Student exhibitions
9. Field Experiences

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

ART - BFA (5305)

Concentration in Psychology (PSYC)

This program is effective as of Fall 2020.

Revised 02.2020

UCC 12.3.2019

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ART 100	2-D Design	3
ART 105	Basic Studio Drawing	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
Creative & Aesthetic Inquiry (p. 29)		3
SUBJ 139	Foundations of Academic Discovery <sup>3</sup>	3
<b>Hours</b>		<b>16</b>

<b>Spring</b>		
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
ART 101	3-D Design	3
ART 1XX	Basic Studio	3
ART 1XX	Basic Studio	3
PSYC 105	Introduction to Psychology (Social Science Inquiry)	3
<b>Hours</b>		<b>18</b>

### Second Year

<b>Fall</b>		
POLS 235	Civil Discourse and Democracy	3
Concentration Course <sup>1</sup>		3
ART 225	Overview of Western Art	3
ART 1XX	Basic Studio	3
ART 2XX	Intermediate Studio	3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>

<b>Spring</b>		
ART 226	Overview of World Art	3
SCI 101	Science of Life	3
ART 2XX	Intermediate Studio	3
ART 2XX	Intermediate Studio	3
ART 2XX	Intermediate Studio	3
Concentration Course <sup>1</sup>		3
<b>Hours</b>		<b>18</b>

### Third Year

<b>Fall</b>		
SCI 102	Understanding the Physical World	3
Thematic Thread Requirement (p. 29)		3
ART 3XX	Advanced Studio	3
ART 3XX	Advanced Studio	3
ART 3XX or 4XX	ART Elective	3
Concentration Course <sup>1</sup>		3
<b>Hours</b>		<b>18</b>

<b>Spring</b>		
Humanities Inquiry (p. 29)		3
ART 3XX	Advanced Studio	3

ART 3XX	Advanced Studio	3
ART 300	Art Seminar	3
Concentration Course <sup>1</sup>		3
ART 3XX	Art History	3
<b>Hours</b>		<b>18</b>

**Fourth Year****Fall**

Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
ART 4XX	Senior Studio	3
ART 4XX	Senior Studio	3
ART 3XX or 4XX	ART Elective	3
<b>Hours</b>		<b>15</b>

**Spring**

ART 3xx	Art History	3
Thematic Thread Requirement (p. 29)		3
ART 30X or 40X	Art Elective	3
ART 4XX	Senior Studio	3
ART 4XX	Senior Project	3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>133</b>

<sup>1</sup> Concentration Courses (select 4 from the following):  
PSYC 205, PSYC 208, PSYC 233, PSYC 240, PSYC 244, PSYC 276,  
PSYC 315, PSYC 377

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>3</sup> Course offered in multiple subjects; cannot take course in first major subject.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

ART - BFA (5305)

Concentration in Psychology (PSYC)

Revised: 05.13.2022

## Art, Bachelor of Fine Arts (BFA) - Concentration in Sculpture

### Program Learning Outcomes

- **Critical Thinking:** Art majors will locate, analyze and synthesize art historical information and context within their own work.
- **Degree Program Writing Competency:** Students will be able to effectively communicate in writing for purposes of the discipline.
- **Direction:** Art majors develop a personal direction through their choice of medium, idea and/or style. Students will demonstrate intellectual and artistic curiosity while committing to improvement.
- **Professional Proficiency:** Art majors will perceive, discuss and demonstrate professional proficiency upon graduation by applying their knowledge and skills of fine art.

- **Technique:** Art majors will demonstrate technical aptitude. The department assesses the technical quality of student production. Each medium varies with its technical demands.

## Related Links

Art - Sculpture, BFA Program Page (<https://www.sru.edu/academics/majors-and-minors/art-bfa-concentration-in-sculpture/>)

Art Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/art/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	78

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
<b>Subtotal</b>		<b>15</b>

### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Science Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
<b>Subtotal</b>		<b>15</b>

### Thematic Thread

Select 12 Credits (p. 29) <sup>2</sup>	12
<b>Total Hours</b>	<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 39 major credits must be taken at SRU or PASSHE
- 39 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Courses</b>		
ART 100	2-D Design <sup>1</sup>	3
ART 101	3-D Design <sup>1</sup>	3
ART 105	Basic Studio Drawing <sup>1</sup>	3
ART 225	Overview of Western Art <sup>1</sup>	3
ART 226	Overview of World Art <sup>1</sup>	3
ART 300	Art Seminar <sup>1</sup>	3
<b>Art History Electives</b>		
Select two of the following:		6

ART 325	North American Art History <sup>1</sup>	
ART 335	The Renaissance Tradition <sup>1</sup>	
ART 345	Foundations of Modern Art <sup>1</sup>	
ART 355	Early Modern Art <sup>1</sup>	
ART 365	Art Since 1945 <sup>1</sup>	
ART 420	Art History Seminar <sup>1</sup>	

### Sculpture Concentration (15 Credits)

Concentration courses count towards BFA Studio requirements. (200-400 level courses are repeatable – see below for course details).

Select 12 credits from the following:		
ART 110	Basic Studio Sculpture <sup>1</sup>	0-3
ART 210	Intermediate Studio Sculpture <sup>1</sup>	0-6
ART 310	Advanced Studio Sculpture <sup>1</sup>	0-9
ART 410	Senior Studio Sculpture <sup>1</sup>	0-6
<i>Sculpture 1st Concentration Required – Capstone Course</i>		
ART 430	Senior Project Sculpture <sup>1</sup>	3

### Additional Studio Requirements

<b>100 Level Electives</b>		
Select three of the following courses, no class may be repeated:		9
ART 106	Basic Studio Painting <sup>1</sup>	
ART 107	Basic Studio Photography <sup>1</sup>	
ART 108	Basic Studio Printmaking <sup>1</sup>	
ART 109	Basic Studio Metalsmithing <sup>1</sup>	
ART 110	Basic Studio Sculpture <sup>1</sup>	
ART 111	Basic Studio Fiber Art <sup>1</sup>	
ART 112	Basic Studio Ceramics <sup>1</sup>	
ART 113	Basic Studio Graphic Design <sup>1</sup>	
<b>200 Level Electives</b>		
Select four of the following courses, you may take any class twice:		12
ART 205	Intermediate Studio Drawing <sup>1</sup>	
ART 206	Intermediate Studio Painting <sup>1</sup>	
ART 207	Intermediate Studio Photography <sup>1</sup>	
ART 208	Intermediate Studio Printmaking <sup>1</sup>	
ART 209	Intermediate Studio Metalsmithing <sup>1</sup>	
ART 210	Intermediate Studio Sculpture <sup>1</sup>	
ART 211	Intermediate Studio Fiber Art <sup>1</sup>	
ART 212	Intermediate Studio Ceramics <sup>1</sup>	
ART 213	Intermediate Studio Graphic Design <sup>1</sup>	
ART 214	Intermediate Studio Digital Media <sup>1</sup>	

<b>300 Level Electives</b>		
Select four of the following courses, you may take any class up to three times:		12
ART 305	Advanced Studio Drawing <sup>1</sup>	
ART 306	Advanced Studio Painting <sup>1</sup>	
ART 307	Advanced Studio Photography <sup>1</sup>	
ART 308	Advanced Studio Printmaking <sup>1</sup>	
ART 309	Advanced Studio Metalsmithing <sup>1</sup>	
ART 310	Advanced Studio Sculpture <sup>1</sup>	
ART 311	Advanced Studio Fiber Art <sup>1</sup>	
ART 312	Advanced Studio Ceramics <sup>1</sup>	
ART 313	Advanced Studio Graphic Design <sup>1</sup>	



ART 314	Advanced Studio Digital Media <sup>1</sup>	
<b>400 Level Electives</b>		
Select three of the following courses, you may take any class up to two times:		9
ART 405	Senior Studio Drawing <sup>1</sup>	
ART 406	Senior Studio Painting <sup>1</sup>	
ART 407	Senior Studio Photography <sup>1</sup>	
ART 408	Senior Studio Printmaking <sup>1</sup>	
ART 409	Senior Studio Metalsmithing <sup>1</sup>	
ART 410	Senior Studio Sculpture <sup>1</sup>	
ART 411	Senior Studio Fiber Art <sup>1</sup>	
ART 412	Senior Studio Ceramics <sup>1</sup>	
ART 413	Senior Studio Graphic Design <sup>1</sup>	
ART 414	Senior Studio Digital Media <sup>1</sup>	
<b>Art Electives</b>		
Select from 300-400 level courses <sup>1</sup>		9
<b>Total Hours</b>		<b>78</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Student leadership development
5. Service opportunities (e.g., Empty Bowls program)
6. Career education and development
7. Internships
8. Student exhibitions
9. Field Experiences

## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

ART - BFA (5305)

Concentration in Sculpture (SCLP)

This program is effective as of Fall 2020.

Revised 03.09.2021

UCC 12.3.2019

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ART 225	Overview of Western Art	3
ART 100	2-D Design	3
ART 105	Basic Studio Drawing	3
ESAP 101	FYRST Seminar *	1
ENGL 102	Critical Writing	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
ART 101	3-D Design	3
ART 1X X	Basic Studio (Sculpture Concentration)	3
ART 1XX	Basic Studio	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
POLS 235	Civil Discourse and Democracy	3
Humanities Inquiry (p. 29)		3
Creative & Aesthetic Inquiry (p. 29)		3
ART 1XX	Basic Studio	3
ART 2XX	Intermediate Studio	3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
SCI 102	Understanding the Physical World	3
ART 226	Overview of World Art	3
ART 2XX	Intermediate Studio	3
ART 2XX	Intermediate Studio	3
ART 2XX	Intermediate Studio (Sculpture Concentration)	3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
SCI 101	Science of Life	3
ART 30X	Art History	3
ART 3XX	Advanced Studio	3
ART 3XX	Advanced Studio	3
ART 30X or 40X ART Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Thematic Thread Requirement (p. 29)		3
Social Science Inquiry (p. 29)		3
ART 3XX	Advanced Studio	3
ART 3XX	Advanced Studio (Sculpture Concentration)	3
ART 300	Art Seminar	3
<b>Hours</b>		<b>15</b>

**Fourth Year****Fall**

Thematic Thread Requirement (p. 29)	3
Thematic Thread Requirement (p. 29)	3
ART 4XX Senior Studio	3
ART 4XX Senior Studio (Sculpture Concentration)	3
ART 30X or 40X ART Elective	3
<b>Hours</b>	<b>15</b>

**Spring**

ART 3XX Art History	3
Thematic Thread Requirement (p. 29)	3
ART 30X or 40X Art Elective	3
ART 4xX Senior Studio	3
ART 4xX Senior Project (Sculpture Concentration)	3
<b>Hours</b>	<b>15</b>
<b>Total Hours**</b>	<b>121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take in first major subject

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

ART - BFA (5305)

Concentration in Sculpture (SCLP)

Revised: 05.13.2022

## Art, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Art, Minor Program Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/art/programs/>)

Art Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/art/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.00 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Basic 2D Studio Course</b>		
Select one of the following:		3
ART 105	Basic Studio Drawing	
ART 106	Basic Studio Painting	
ART 107	Basic Studio Photography	
ART 108	Basic Studio Printmaking	
ART 114	Basic Studio Digital Media	
<b>Basic 3D Studio Course</b>		
Select one of the following:		3
ART 109	Basic Studio Metalsmithing	
ART 110	Basic Studio Sculpture	
ART 111	Basic Studio Fiber Art	
ART 112	Basic Studio Ceramics	
<b>Art History Course</b>		
Select one of the following:		3
ART 225	Overview of Western Art	
ART 226	Overview of World Art	
ART 325	North American Art History	
ART 335	The Renaissance Tradition	
ART 345	Foundations of Modern Art	
ART 355	Early Modern Art	
ART 365	Art Since 1945	
ART 420	Art History Seminar	
<b>Art Synthesis Courses</b>		
Select two of the following:		6
ART 205	Intermediate Studio Drawing	
ART 206	Intermediate Studio Painting	
ART 207	Intermediate Studio Photography	
ART 208	Intermediate Studio Printmaking	
ART 209	Intermediate Studio Metalsmithing	
ART 210	Intermediate Studio Sculpture	
ART 211	Intermediate Studio Fiber Art	
ART 212	Intermediate Studio Ceramics	
ART 213	Intermediate Studio Graphic Design	
ART 214	Intermediate Studio Digital Media	
<b>Advanced Studio Courses</b>		
Select two of the following:		6
ART 305	Advanced Studio Drawing	
ART 306	Advanced Studio Painting	
ART 307	Advanced Studio Photography	
ART 308	Advanced Studio Printmaking	
ART 309	Advanced Studio Metalsmithing	
ART 310	Advanced Studio Sculpture	
ART 311	Advanced Studio Fiber Art	
ART 312	Advanced Studio Ceramics	
ART 313	Advanced Studio Graphic Design	
ART 314	Advanced Studio Digital Media	
<b>Total Hours</b>		<b>21</b>

- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

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PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN ART (04A)

This program is effective as of Fall 2006

Revision date: 8-2019

## Art: Design, Certificate

Students obtaining a Certificate in Art: Design will develop an understanding of the design process, and will learn how to compose technical, non-technical and expressive information into attractive and visually clear and concise forms. Students from a wide range of degree programs will focus on the presentation of discipline-based subject matter using digital and traditional methods of representation of facts. Artwork will range from an expressive response to subject matter to a creative representation of facts. The skills developed in this program will augment students' communication skills and enhance possible career opportunities.

The Certificate in Art: Design will also be attractive to individuals not currently affiliated with SRU. Design skills will help a candidate organize visual information in any field of study, and will be useful in the pursuit of a wide variety of personal projects and/or career directions.

To access Certificate Requirements, please view the Curriculum Guide tab.

## Related Links

Art - Design, Certificate Program Page (<https://www.sru.edu/academics/certificates/art-design-certificate/>)

Art Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/art/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Certificate GPA: 2.00 or higher

### Certificate Requirements

Code	Title	Hours
Required Courses		
Select twelve credits of the following:		12
ART 100	2-D Design	

or ART 114	Basic Studio Digital Media
ART 213	Intermediate Studio Graphic Design (repeatable one time)
ART 213	Intermediate Studio Graphic Design (repeatable one time)
ART 313	Advanced Studio Graphic Design (repeatable one time)
ART 413	Senior Studio Graphic Design (repeatable two times)
ART 414	Senior Studio Digital Media (repeatable two times)
<b>Total Hours</b>	<b>12</b>

- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

CERTIFICATE IN ART: DESIGN (5DSN)

This program is effective as of Spring 2016.

Revision date: 10-2019

## Art: Digital Media, Certificate

Students obtaining a Certificate in Art: Digital Media will have the opportunity to explore a wide range of digitally based or enhanced methods of artistic production. Through the prescribed sequence of courses, students will study historical and contemporary approaches to Digital Art, as well as develop skills and understandings applicable to two-dimensional, three-dimensional, time-based and potentially other forms of Digital Art. Students will compile a focused Digital Art portfolio as they develop a personal artistic stance and enact their individual artistic visions.

To access Certificate Requirements, please view the Curriculum Guide tab.

## Related Links

Art - Digital Media, Certificate Program Page (<https://www.sru.edu/academics/certificates/art-digital-media-certificate/>)

Art Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/art/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Certificate GPA: 2.0 or higher

### Certificate Requirements

Code	Title	Hours
<b>Required Courses</b>		
Select twelve credits of the following:		12
ART 114	Basic Studio Digital Media	
ART 214	Intermediate Studio Digital Media (repeatable one time)	
ART 314	Advanced Studio Digital Media (repeatable one time)	
ART 414	Senior Studio Digital Media (repeatable two times )	
ART 434	Senior Project Digital Media (Capstone course for BFA students, with permission of instructor)	

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

CERTIFICATE IN ART: DIGITAL MEDIA (5DGM)

This program is effective as of Spring 2015.

Revision date: 10-2019

## Art: Graphic Design, Certificate

The ability to compose technical and non-technical information into an attractive and visually clear and concise form will help in the design and presentation of a wide range of conceptual and/or subject-specific projects. Candidates will gain an understanding of design-related concepts and experience with graphic design software in the communication of ideas. The skills developed in this program, and in the inclusion of projects produced in the program in an application portfolio, will improve a candidate's qualifications and job prospects.

To access Certificate Requirements, please view the Curriculum Guide tab.

### Related Links

Art - Graphic Design, Certificate Program Page (<https://www.sru.edu/academics/certificates/art-graphic-design-certificate/>)

Art Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/art/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Certificate GPA: 2.00 or higher

### Certificate Requirements

Code	Title	Hours
<b>Required Courses</b>		
Select one of the following:		3
ART 100	2-D Design (permission required for non-art majors)	
ART 213	Intermediate Studio Graphic Design (repeatable one time)	
ART 114	Basic Studio Digital Media	3
COMM 232	Publication Production	3
COMM 334	Publication Production	3
<b>Elective Courses</b>		
Select one of the following:		3
ART 207	Intermediate Studio Photography	
ART 213	Intermediate Studio Graphic Design (repeatable one time)	
ART 214	Intermediate Studio Digital Media	
ART 307	Advanced Studio Photography	
ART 313	Advanced Studio Graphic Design	
ART 314	Advanced Studio Digital Media	
ART 407	Senior Studio Photography	
ART 413	Senior Studio Graphic Design	
ART 414	Senior Studio Digital Media	

**Total Hours** **15**

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

CERTIFICATE IN ART: GRAPHIC DESIGN (5GDS)

This program is effective as of Spring 2016.

Revision date: 5-2019

UCC 3.5.2019

## Art: Photography, Certificate

Students obtaining a Certificate in Art: Photography will have the opportunity to explore a wide range of analog and digital approaches to fine art photography. Photographic skills, techniques and concepts will be expanded, honed and potentially utilized with other media as students follow individual artistic directions. Students will develop and maintain a cohesive photographic portfolio suitable for public presentation.

To access Certificate Requirements, please view the Curriculum Guide tab.

### Related Links

Art - Photography, Certificate Program Page (<https://www.sru.edu/academics/certificates/art-photography-certificate/>)

Art Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/art/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

### Curriculum Guide

#### GPA Requirement

Certificate GPA: 2.0 or higher

#### Certificate Requirements

Code	Title	Hours
Select twelve credits of the following:		12
ART 107	Basic Studio Photography	
ART 207	Intermediate Studio Photography (repeatable one time)	
ART 307	Advanced Studio Photography (repeatable one time)	
ART 407	Senior Studio Photography (repeatable two times)	
ART 427	Senior Project Photography (Capstone course for BFA students, with permission of instructor)	
<b>Total Hours</b>		<b>12</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

#### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

CERTIFICATE IN ART: PHOTOGRAPHY (5PHT)

This program is effective as of Spring 2015.

Revision date: 10-2019

## Nonprofit Management in Art, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

### Related Links

Non-profit Management in Art, Minor Program Page ([https://www.sru.edu/academics/majors-and-minors/nonprofit-management-in-art-\(minor\)/](https://www.sru.edu/academics/majors-and-minors/nonprofit-management-in-art-(minor)/))

Art Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/art/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

### Curriculum Guide

#### GPA Requirement

Minor GPA: 2.0 or higher

#### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Courses</b>		
ART 113	Basic Studio Graphic Design	3
ART 450	Internship	3
ENGL 429	Grant and Proposal Writing	3
NLPA 220	Introduction to Nonprofit Management	3
NLPA 305	Financial Best Practices for Decision Makers	3
NLPA 320	Community Change and Development	3
<b>Total Hours</b>		<b>18</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

#### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN NONPROFIT MANAGEMENT IN ART (04E)

Effective Summer 2020

Revised 12-2019



UCC 12.03.2019

# Criminology and Criminal Justice

Chair	Secretary	Location	Department Phone
Dr. Rebecca Ridener	Kathleen Dombeck	211 Spotts World Culture Building	724-738-2084

Department Web Site URL (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/criminology-and-criminal-justice/>)  
 Department Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/crim-fs.pdf>)

## Faculty

### David Champion

Professor  
 Criminology & Criminal Justice  
 Ph.D., Indiana University of Pennsylvania  
 M.A., Ball State University  
 B.A., State University of New York at Buffalo

### Kerry Edwards

Associate Professor  
 Criminology & Criminal Justice  
 Ph.D., University of New Mexico  
 M.A., University of New Mexico  
 B.A., University of New Mexico

### Sarah Kuehn

Associate Professor  
 Criminology & Criminal Justice  
 Ph.D., Simon Fraser University  
 M.A., Simon Fraser University

### Daniel McEvoy

Instructor  
 Criminology & Criminal Justice  
 M.A., Slippery Rock University  
 B.S., Penn State University

### Daniel McEwen

Instructor  
 Criminology & Criminal Justice  
 J.D., Thomas Cooley Law School  
 B.S., University of Pittsburgh

### Rebecca Ridener

Associate Professor  
 Criminology & Criminal Justice  
 Ph.D., University of Cincinnati  
 M.S., University of Cincinnati  
 B.A., Emory University

### Jeffrey Roth

Assistant Professor  
 Criminology & Criminal Justice  
 Ph.D., Indiana University of Pennsylvania  
 M.S., Tiffin University  
 B.A., Patrick Henry College

### Youngyol Schanz

Professor

Criminology & Criminal Justice  
 Ph.D., Indiana University of Pennsylvania  
 M.A., Wichita State University  
 B.S., Dankook University (Korea)

## Programs

### Majors

- Criminology and Criminal Justice, Bachelor of Arts (BA) (p. 842)
- Criminology and Criminal Justice, Bachelor of Arts (BA) - Concentration in Community Corrections (p. 846)

### Minors

- Criminology, Minor (p. 850)

### Certificates

- Criminal Justice and Spanish Cultural & Language Competency, Certificate (p. 841)

## Courses

### CRIM 105 - Human Diversity

An orientation to living and working with diverse populations within modern American society, including examination of the strengths and stresses associated with diversities.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

### CRIM 110 - Introduction to Criminology & Criminal Justice Systems

This course covers the basic principles of the criminal justice system and criminological theory. Students will be introduced to policing, corrections, the criminal court process, legal procedures, and criminological theories, among other fundamentals of the criminology discipline.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Transfer Thread Completion Course

### CRIM 115 - Proseminar

This is a writing intensive course that prepares criminology/criminal justice students for standard academic and professional expectations for the field. This class encompasses writing requirements and style for criminal justice and basic library research skills.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

Enrollment is limited to students with a program in Criminology & Criminal Justice or Criminology.

**CRIM 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**CRIM 170 - Crime: Why Do We Do It?**

This course examines different theoretical explanations of criminal behavior and how to test them using social science research methods. Further, the course explores how to translate these theories into public policy and draws attention to the interdisciplinary nature of the field of criminology.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**CRIM 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CRIM 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**CRIM 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CRIM 253 - American Policing**

This course covers the introductory elements of US policing and law enforcement. Topics of study include operations, legal aspects, ethics, diversity and other key issues.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**CRIM 263 - Introduction to Criminal Procedure**

This course covers the processes of criminal procedure. It includes landmark legal cases, search and seizure requirements, use of force, arrest, interrogation and court structures.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**CRIM 273 - American Corrections**

Examines the legally sanctioned methods of dealing with lawbreakers. The correctional methods studied will include institutional and community corrections, and the newer dispositions such as community service, restitution, and electronic monitoring. Current issues examined will include prison gangs, the problem of AIDS, women in prison, and prison privatization.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment is limited to students with a program in Criminology & Criminal Justice or Criminology.

**CRIM 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CRIM 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**CRIM 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CRIM 301 - Theoretical Criminology**

A critical review of pure and applied theory within the field of criminology, including coverage of classical, biological, psychological, sociological, economic, political, and integrated theories of the causes of crime.

Prerequisite: CRIM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Criminology & Criminal Justice.

**CRIM 302 - Sexual Violence**

This course will explore multiple aspects of sexual violence including typologies and legal classifications of sex crimes, the motivations of offenders, victimology/trauma, studies of convicted rapists, social/cultural/media effects and context, and the criminal investigation of sex offenses.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

**CRIM 317 - Statistical Methods in Criminology and Criminal Justice**

This course is designed to introduce students to basic principles of probability theory, data analysis and data interpretation. Using SPSS, students will engage in basic data analysis, including descriptive and inferential statistics. More specifically, this course will cover univariate and bivariate measures, analyses of cross classified data, correlation, t-tests, analysis of variance, regression and related measures. Emphasis will be placed on how to use, interpret and understand some of the basic techniques used by criminal justice researchers and practitioners.

Prerequisite: CRIM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Criminology & Criminal Justice.

**CRIM 318 - Research Methods in Criminology and Criminal Justice**

This course is an introduction to criminological research that is intended to develop the student's research and analytical skills. Specifically, the course will focus on the theory of inquiry, research design, data gathering methods (surveys, secondary data and unobtrusive methods, field observation), evaluation research analysis, sampling and research reporting. Students will also learn how to use library resources as well as electronic resources.

Prerequisite: CRIM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Criminology & Criminal Justice.

**CRIM 321 - Criminal Justice interventions 1**

A review of basic theories, philosophies, methods, and skills that underlie successful community and correctional-based interventions with individuals serviced by the federal, state, and/or local criminal justice systems. Coverage will include the overrepresentation of minorities within the American correctional system and service provision to culturally diverse populations.

Prerequisites: CRIM 110<sup>D</sup> and CRIM 273<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Criminology & Criminal Justice.

**CRIM 322 - Criminal Justice Interventions 2**

A review of basic theories, philosophies, methods, and skills that underlie successful community and correctional-based interventions with an emphasis on groups and families serviced by the federal, state, and/or local criminal justice systems. Topic coverage also includes examining the overrepresentation of minorities under correctional supervision and service provision to culturally diverse populations.

Prerequisites: CRIM 110<sup>D</sup> and CRIM 273<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 326 - Victimology**

This course will present the student with a detailed understanding of the scope of victimology and the extent of criminal victimization by examining specific crimes types, the impact of crime on victims and society, the role of victims within the criminal justice system, specific remedies, and victim rights and services.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 327 - Criminal Justice and the Multicultural Community**

This course will examine current issues and social problems relating to the administration of justice in a culturally diverse society. The focus of the course will be on the changing ethnicity of communities and related changes in social and institutional public policy.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 328 - Transnational Crime & Justice**

This course focuses on the historical development and current status of various forms of transnational crime from the perspective of the international criminal justice community. This course explores the roots and operations of organized crime and how globalization has facilitated the emergence of transnational organized crime in the U.S. and in various regions throughout the world. Particular emphasis is given to issues of drug trafficking, illegal arms trade, money laundering, human trafficking and sex trafficking. This course also examines the current strategies for the containment and control of such activities.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 333 - Crime, Justice and Society**

An exploration of the major theories of crime with an emphasis of those contemporary theories that explore the relationship of race, gender, and crime. Topics may include prostitution, rape, hate crimes, and crimes against the gay community.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 343 - Criminal Investigations**

This course provides an introduction to criminal evidence and investigations. The topics include how evidence is collected and developed, the different types of evidence, the role of evidence in investigation, and basic investigative principles.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 345 - Juvenile Delinquency**

The behaviors of adolescents in modern societies have resulted in the need for society to exert various methods of social control. The reasons for these formal and informal control strategies are examined from a sociological view of institutional changes.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 360 - Police and Society**

This class examines the role of law enforcement and policing in contemporary society. This course also covers the history of policing, policing theory, police culture, different law enforcement agencies, and the social role of modern police agencies.

Prerequisite: CRIM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Criminology & Criminal Justice or Criminology.

**CRIM 368 - Comparative Criminal Justice Abroad**

This course examines similarities and differences between the United States' criminal justice system and another country's criminal justice system. The course requires a travel abroad activity that will include experiential learning regarding criminal justice components, such as police, courts, and corrections programs.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2 or Sophomore 2.

**CRIM 370 - Inside Out Views of Criminal Justice Issues**

This course creates a partnership between institutions of higher learning and correctional systems in order to deepen the conversation about criminal justice issues and transform our approaches to understanding crime, society's response to it, justice, inequality, and other issues of social concerns. This semester-long class brings together college students and incarcerated men or women to study as peers behind prison walls.

Prerequisite: CRIM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Criminology & Criminal Justice.

**CRIM 380 - Women & the Criminal Justice System**

This course will focus on theoretical and contemporary issues involving female practitioners, victims and offenders in the criminal justice system. Students will have the opportunity to become acquainted with and evaluate the political, legal and social issues of crime relating to women. This course will also examine diversity issues. More specifically, this course will examine how gender, race/ethnicity and class are related to the way they are treated in the criminal justice system in the U.S.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisite: CRIM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 402 - Forensic Behavior: Crime and the Individual**

This course explores aspects of mental illness, cognitions, psychopathology, mental disorders and other psychological aspects of criminal behavior and their relation to theories of crime. This is a cross-listed course that will fulfill either graduate or undergraduate credit.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**CRIM 404 - Applied Criminal Procedures**

This course addresses the history, legalities, trends and controversies in law adjudication as it pertains to issues of crime and justice. Students will examine the topics of criminal law, landmark cases, prosecution, defense, court procedures and decision-making and their interaction with our society.

Prerequisite: CRIM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 405 - White Collar Crime**

This course explores the complex issues surrounding white collar crime. In terms of white collar crime, the topics addressed may include: the complexities of defining it, theoretical explanations for it, the economical, physical and social costs that result from these types of crimes, and the issues the criminal justice system faces in trying to control it.

Prerequisite: CRIM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 408 - Capstone: Ethics and Criminal Justice**

This course examines the traditional schools of ethical thought and how they are applicable to the field of criminology, crime, and justice. Students will study formal works in ethics and morality and develop understanding of their role in the criminal justice professions as well as issues of crime, law, and society. This course is designed as a writing intensive course.

Prerequisite: CRIM 115<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with department of Criminology & Criminal Justice.

**CRIM 414 - Criminal Justice Policy**

This course explores the contemporary criminal justice system, major systems of social control and their policies and practices; as well as policies related to courts, victimology, juvenile justice and comparative criminal justice. These policies will be studied through the lenses of individual liberties, collective formalized controls, multicultural factors and issues related to race, gender and diversity.

Prerequisite: CRIM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Criminology & Criminal Justice.

**CRIM 416 - Community Corrections**

The course explores the origins of community corrections and its role in the American criminal justice system. Starting with pre-arrest diversion, the course covers the major issues and topics associated with community correction programs. Students are required to complete a service learning component.

Prerequisites: CRIM 110<sup>D</sup> and CRIM 273<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**CRIM 422 - The Death Penalty**

An examination of the problems and issues related to the death penalty in the United States, including the history of capital punishment, important Supreme court decisions, how the various jurisdictions deal with capital cases, the comparative costs of incarceration and executions, miscarriages of justices in capital cases, the impact of minority status and how the criminal justice responds to these issues.

Prerequisite: CRIM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**CRIM 450 - Internship**

Supervised placement in selected professional agencies.

Credits: 1-12

Term(s) Typically Offered: Offered Every Term

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 468 - Crime & Media**

This course will examine images of crime and criminal justice as portrayed and presented by the mass media including popular media (fictional television show, music, novels, etc.) as well as "news" programming and print media. More specifically, the course will analyze how crime and criminals, and criminal justice systems (police, courts and corrections) are portrayed by the mass media. This course will analyze the media's relationship to criminological theories as well as to criminal justice policies and practices. This course will also examine how gender, race and class are related to the way crime is depicted in the mass media.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 490 - Independent Study**

Independent research under the guidance of a faculty member.

Prerequisite: Permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. (repeatable up to 6 credits) Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**CRIM 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisite: CRIM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Criminal Justice and Spanish Cultural & Language Competency, Certificate

The Certificate in Criminal Justice and Spanish Cultural & Language Competency prepares students to speak conversational Spanish and gain competency in Spanish cultures and literature. This certificate represents a valuable credential for those seeking to enter a criminal justice profession that often demands practical skills in understanding and working with diverse cultures.

To access Certificate Requirements, please view the Curriculum Guide tab.

## Related Links

Criminal Justice and Spanish Cultural and Language Competency, Certificate Program Page (<https://www.sru.edu/academics/certificates/criminal-justice-and-spanish-cultural-and-language-competency-certificate/>)

Criminology and Criminal Justice Department Page (<https://www.sru.edu/academics/colleges-and-departments/cja/departments/criminology-and-criminal-justice/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Certificate GPA: 2.0 or higher

### Certificate Requirements

Code	Title	Hours
<b>Required Courses</b>		
Select fifteen credits of the following:		15
SPAN 103 or SPAN 104	Spanish Language & Culture III <sup>1</sup> Situational Spanish	
SPAN 200	Writing in Spanish for the Professions I <sup>1</sup>	
SPAN 201	Speaking in Spanish for the Professions I <sup>1</sup>	
SPAN 215	Topics in Hispanic Culture	
SPAN 220	Understanding Hispanic Cultures Through Reading <sup>1</sup>	
CRIM 343 & CRIM 360	Criminal Investigations and Police and Society	
CRIM 380 & CRIM 404	Women & the Criminal Justice System and Applied Criminal Procedures	
<b>Total Hours</b>		<b>15</b>

<sup>1</sup> A grade of "C" or better is required.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

CERTIFICATE CRIMINAL JUSTICE AND SPANISH CULTURAL AND LANGUAGE COMPETENCY (5CJS)

This program is effective as of Fall 2020.

Revision date: 07.08.2020

UCC 03.05.2020

# Criminology and Criminal Justice, Bachelor of Arts (BA)

## Program Learning Outcomes

- Demonstrate professional proficiency in the academic study of crime, justice, and criminology.
  - Develop competence in the history, theory and practice of the administration of criminal justice and its established content areas of law enforcement, courts and corrections.
  - Demonstrate understanding and application of criminological theories of crime causation, offenders, victims, and typologies.
  - Explain and understand the basic principles of research and the use and interpretation of statistics as they apply to criminological theory, existing crime data, and Criminal Justice policy evaluations.
  - Community corrections specialization students will be able to demonstrate knowledge of the history, philosophy, policy and practice of balanced and restorative justice, alternative sentencing, diversionary adjudication, human services and the principles of offender treatment in a community setting.
- Achieve acceptable levels of critical thinking, synthesis and analysis of informational sources about the study of crime and justice.
  - Critically evaluate criminological literature and scholarship.
  - Apply critical analysis to current controversies and topics in criminal justice.
  - Synthesize disparate informational sources about criminal justice issues, policies or theories into synergistic and cogent understandings.
  - Recognize and understand the various perspectives of controversial issues in crime and justice.
- Understand and explain the importance of the study of and application of ethics, morals and values in Criminal Justice.
  - Formulate applications of the general field of ethical study to specific, criminal justice-related topics.

- Employ ethical reflection and judgment to quickly emerging situations commonly found in the practice of law enforcement, correctional and court workgroup duties.
- Develop familiarity with professional codes of ethics employed in the field.
- Learn and appreciate the role of human diversity in Criminal Justice.
  - Demonstrate how diversity in human experience and culture applies to the professional practice of criminal justice in law enforcement, court processes, and corrections.
- Recognize the historical and contemporary roles of racial, ethnic, religious, gender/sex identity, LGBTQ+, and lifestyle intolerance in human violence and aggression.
- Examine and increase awareness of diversity challenges such as racial profiling, violence against women, and hate crime legislation and enforcement.

## Related Links

Criminology and Criminal Justice, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/criminology-and-criminal-justice/>)

Criminology and Criminal Justice Department Page (<https://www.sru.edu/academics/colleges-and-departments/cja/departments/criminology-and-criminal-justice/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

Community Correction Concentration GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Modern Language Requirements	0-9
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	40
	Electives	38

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	

POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Science Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
Subtotal		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
Complete 0-9 credits		0-9
<b>Total Hours</b>		<b>0-9</b>

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	

CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 20 major credits must be taken at SRU or PASSHE
- 20 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Core Courses</b>		
CRIM 110	Introduction to Criminology & Criminal Justice Systems <sup>1</sup>	3
CRIM 115	Proseminar <sup>1</sup>	1
CRIM 253	American Policing <sup>1</sup>	3
CRIM 263	Introduction to Criminal Procedure <sup>1</sup>	3
CRIM 273	American Corrections <sup>1</sup>	3
CRIM 301	Theoretical Criminology <sup>1</sup>	3
CRIM 317	Statistical Methods in Criminology and Criminal Justice <sup>1</sup>	3
CRIM 318	Research Methods in Criminology and Criminal Justice <sup>1</sup>	3
CRIM 105 or SOWK 105	Human Diversity <sup>1,2</sup> Human Diversity	3
CRIM 345	Juvenile Delinquency <sup>1</sup>	3
CRIM 408	Capstone: Ethics and Criminal Justice <sup>1</sup>	3
Subtotal		31
<b>Major Electives</b>		
Select nine credits from the following:		9
CRIM 190	Experimental <sup>1</sup>	
CRIM 198	Selected Topics <sup>1</sup>	
CRIM 290	Experimental <sup>1</sup>	
CRIM 298	Selected Topics <sup>1</sup>	
CRIM 302	Sexual Violence <sup>1</sup>	
CRIM 321	Criminal Justice interventions 1 <sup>1</sup>	
CRIM 322	Criminal Justice Interventions 2 <sup>1</sup>	
CRIM 326	Victimology <sup>1</sup>	
CRIM 327	Criminal Justice and the Multicultural Community <sup>1</sup>	
CRIM 328	Transnational Crime & Justice <sup>1</sup>	
CRIM 343	Criminal Investigations <sup>1</sup>	
CRIM 360	Police and Society <sup>1</sup>	
CRIM 368	Comparative Criminal Justice Abroad <sup>1</sup>	
CRIM 370	Inside Out Views of Criminal Justice Issues <sup>1</sup>	
CRIM 380	Women & the Criminal Justice System <sup>1</sup>	
CRIM 390	Experimental <sup>1</sup>	
CRIM 398	Selected Topics <sup>1</sup>	

CRIM 402	Forensic Behavior: Crime and the Individual <sup>1</sup>
CRIM 404	Applied Criminal Procedures <sup>1</sup>
CRIM 405	White Collar Crime <sup>1</sup>
CRIM 414	Criminal Justice Policy <sup>1</sup>
CRIM 416	Community Corrections <sup>1</sup>
CRIM 422	The Death Penalty <sup>1</sup>
CRIM 450	Internship <sup>1</sup>
CRIM 468	Crime & Media <sup>1</sup>
CRIM 498	Selected Topics <sup>1</sup>
SOWK 334	Clinical Perspectives on DSM Diagnoses <sup>1</sup>
Subtotal	9
<b>Total Hours</b>	<b>40</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA.

<sup>2</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year long).
2. High-Impact Practice (HIP) designated classes (CRIM 343 and CRIM 370)
3. Student-faculty research
4. Student leadership opportunities – CRIM Club, Alpha Sigma Honors Society
5. Service-learning classes
6. Internships
7. Volunteering opportunities

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

CRIMINOLOGY & CRIMINAL JUSTICE - BA (5 70)  
w/optional Community Corrections Concentration (507C)  
This program is effective as of Summer 2022  
Revised 06.29.2022  
UCC 03.05.20

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
Learning Community Cluster		
CRIM 110	Introduction to Criminology & Criminal Justice Systems	3
CRIM 105	Human Diversity	3
or SOWK 105	or Human Diversity	
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ESAP 101	FIRST Seminar *	1
ENGL 102	Critical Writing	3
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
CRIM 115	Proseminar	1
CRIM 253	American Policing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Social Science Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
CRIM 263	Introduction to Criminal Procedure	3
MODL 101	Modern Language Requirement	3
SCI 101	Science of Life	3
Humanities Inquiry (p. 29)		3
Free elective (or Minor Class)		3
Declare a Thematic Thread <sup>3</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
CRIM 273	American Corrections	3
CRIM 301	Theoretical Criminology	3
MODL 102	Modern Language Requirement	3
SCI 102	Understanding the Physical World	3
Free elective (or Minor Class)		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
CRIM 318	Research Methods in Criminology and Criminal Justice	3
CRIM 345	Juvenile Delinquency	3
Thematic Thread Requirement (p. 29)		3
MODL 103	Modern Language Requirement	3
Free Elective (or Minor Class)		3
<b>Hours</b>		<b>15</b>

**Spring**

CRIM 317	Statistical Methods in Criminology and Criminal Justice	3
CRIM Elective (1) <sup>2</sup>		3
Thematic Thread Requirement (p. 29)		3
Free Elective (or Minor class)		6

**Hours** **15**

**Fourth Year****Fall**

CRIM Elective (2) <sup>2</sup>		3
CRIM Elective (3) <sup>2</sup>		3
Thematic Thread Requirement (p. 29)		3
Free Elective (or Minor Class)		3
Free Elective (or Minor Class)		3

**Hours** **15**

**Spring**

CRIM 408	Capstone: Ethics and Criminal Justice	3
Thematic Thread Requirement (p. 29)		3
Free Elective (or Minor Class)		9

**Hours** **15**

**Total Hours\*\*** **122**

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> Students' choice for CRIM electives are CRIM 190, CRIM 198, CRIM 290, CRIM 298, CRIM 321, CRIM 322, CRIM 326, CRIM 327, CRIM 328, CRIM 343, CRIM 360, CRIM 370, CRIM 380, CRIM 390, CRIM 398, CRIM 402, CRIM 404, CRIM 405, CRIM 414, CRIM 416, CRIM 422, CRIM 450, CRIM 468, CRIM 498 or SOWK 334

<sup>3</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click here (<https://forms.office.com/Pages/ResponsePage.aspx?id=ul1VhjsH90-30bc6d8W9KIM7Wtmwv-VJnD6riXkdMh1UNEFHMUNHOEI5TkJOWIRHVzRCMzI3UldNTi4u>) to declare a thread.

\* Students are encouraged to take ESAP 101 as a Free Elective.

• CRIM BA Major requires 40 Credit Hours (31 Core+9 Elective Credits)

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 5 70

Revised date: 04.21.22

## Recommended Four-Year Plan - BA/MA Accelerated Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
Learning Community Cluster		

CRIM 110	Introduction to Criminology & Criminal Justice Systems	3
CRIM 105	Human Diversity	3
or SOWK 105	or Human Diversity	
SUBJ 139	University Seminar <sup>1</sup>	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar	1
Creative & Aesthetic Inquiry (p. 29)		3

**Hours** **16**

**Spring**

CRIM 115	Proseminar	1
CRIM 253	American Policing	3
ENGL 104	Critical Reading	3
Select one of the following:		3

COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Humanities Inquiry (p. 29)		3
Social Science Inquiry (p. 29)		3

**Hours** **16**

**Summer**

CRIM 273	American Corrections	3
CRIM 301	Theoretical Criminology	3
Free Elective (or Minor Class)		3

**Hours** **9**

**Second Year****Fall**

CRIM 263	Introduction to Criminal Procedure	3
CRIM 345	Juvenile Delinquency	3
Modern Language 1		3
MATH 117	Quantitative Reasoning	3
SCI 101	Science of Life	3

**Hours** **15**

**Spring**

Modern Language 2		3
SCI 102	Understanding the Physical World	3
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
Free Elective (or Minor Class)		3

**Hours** **15**

**Summer**

CRIM Elective		3
CRIM Elective		3
Free Elective (or Minor Class)		3

**Hours** **9**

**Third Year****Fall**

Modern Language 3		3
CRIM 317	Statistical Methods in Criminology and Criminal Justice	3
Thematic Thread Requirement (p. 29)		3
Free Elective (or Minor Class)		3



Free Elective (or Minor Class)		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
CRIM 318	Research Methods in Criminology and Criminal Justice	3
CRIM Elective		3
Thematic Thread Requirement (p. 29)		3
Free Elective (or Minor Class)		3
Free Elective (or Minor Class)		
Free Elective (or Minor Class)		3
<b>Hours</b>		<b>15</b>
<b>Summer</b>		
CRIM 408	Capstone: Ethics and Criminal Justice	3
Free Elective (or Minor Class)		3
Free Elective (or Minor Class)		3
<b>Hours</b>		<b>9</b>
<b>Fourth Year</b>		
<b>Fall</b>		
<b>Credits toward MA</b>		
CRIM 610	Administration of Justice	3
CRIM 615	Advanced Criminological Theory	3
CRIM 620	Critical Issues in Corrections	3
CRIM 625	Contemporary Issues in Policing	3
<b>Hours</b>		<b>12</b>
<b>Spring</b>		
<b>Credits toward MA</b>		
CRIM 635	Criminological Research	3
CRIM 660	Criminal Justice Ethics	3
CRIM 630	Statistical Methods in Criminal Justice	3
CRIM 605	White Collar Crime	3
<b>Hours</b>		<b>12</b>
<b>Summer</b>		
<b>Credits toward MA</b>		
CRIM 602	Forensic Behavior: Crime and the Individual	3
CRIM 628	Transnational Crime & Justice	3
<b>Hours</b>		<b>6</b>
<b>Total Hours**</b>		<b>149</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

\* Students are encouraged to take ESAP 101 as a Free Elective.

- CRIM BA Major requires 39 Credit Hours (33 Core + 6 Elective Credits).
- Community Corrections Specialization – CRIM 416, SOWK 355, SOWK 356 + Additional Courses.
- CRIM MA requires 30 Credit Hours.
- Template does not utilize Winter Intercession courses – although courses are likely to be available.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to**

registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Revised Date: 04.21.22

## Criminology and Criminal Justice, Bachelor of Arts (BA) - Concentration in Community Corrections

### Program Learning Outcomes

- Demonstrate professional proficiency in the academic study of crime, justice, and criminology.
  - Develop competence in the history, theory and practice of the administration of criminal justice and its established content areas of law enforcement, courts and corrections.
  - Demonstrate understanding and application of criminological theories of crime causation, offenders, victims, and typologies.
  - Explain and understand the basic principles of research and the use and interpretation of statistics as they apply to criminological theory, existing crime data, and Criminal Justice policy evaluations.
  - Community corrections specialization students will be able to demonstrate knowledge of the history, philosophy, policy and practice of balanced and restorative justice, alternative sentencing, diversionary adjudication, human services and the principles of offender treatment in a community setting.
- Achieve acceptable levels of critical thinking, synthesis and analysis of informational sources about the study of crime and justice.
  - Critically evaluate criminological literature and scholarship.
  - Apply critical analysis to current controversies and topics in criminal justice.
  - Synthesize disparate informational sources about criminal justice issues, policies or theories into synergistic and cogent understandings.
  - Recognize and understand the various perspectives of controversial issues in crime and justice.
- Understand and explain the importance of the study of and application of ethics, morals and values in Criminal Justice.
  - Formulate applications of the general field of ethical study to specific, criminal justice-related topics.
  - Employ ethical reflection and judgment to quickly emerging situations commonly found in the practice of law enforcement, correctional and court workgroup duties.
  - Develop familiarity with professional codes of ethics employed in the field.
- Learn and appreciate the role of human diversity in Criminal Justice.
  - Demonstrate how diversity in human experience and culture applies to the professional practice of criminal justice in law enforcement, court processes, and corrections.
  - Recognize the historical and contemporary roles of racial, ethnic, religious, gender/sex identity, LGBTQ+, and lifestyle intolerance in human violence and aggression.
  - Examine and increase awareness of diversity challenges such as racial profiling, violence against women, and hate crime legislation and enforcement.

## Related Links

Criminology and Criminal Justice - Community Corrections, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/criminology-and-criminal-justice-community-corrections/>)

Criminology and Criminal Justice Department Page (<https://www.sru.edu/academics/colleges-and-departments/cja/departments/criminology-and-criminal-justice/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Modern Language Requirements	0-9
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	40
	Concentration Requirements	15
	Electives	23

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

#### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Science Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15

### Thematic Thread

Select 12 Credits (p. 29) <sup>2</sup>	12
Subtotal	12
<b>Total Hours</b>	<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
Complete 0-9 credits		0-9
<b>Total Hours</b>		<b>0-9</b>

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

### Major Requirements

- 20 major credits must be taken at SRU or PASSHE
- 20 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Core Courses</b>		
CRIM 110	Introduction to Criminology & Criminal Justice Systems <sup>1</sup>	3
CRIM 115	Proseminar <sup>1</sup>	1
CRIM 253	American Policing <sup>1</sup>	3
CRIM 263	Introduction to Criminal Procedure <sup>1</sup>	3
CRIM 273	American Corrections <sup>1</sup>	3
CRIM 301	Theoretical Criminology <sup>1</sup>	3
CRIM 317	Statistical Methods in Criminology and Criminal Justice <sup>1</sup>	3
CRIM 318	Research Methods in Criminology and Criminal Justice <sup>1</sup>	3
CRIM 105 or SOWK 105	Human Diversity <sup>1,2</sup>	3
CRIM 345	Juvenile Delinquency	3
CRIM 408	Capstone: Ethics and Criminal Justice <sup>1</sup>	3
Subtotal		31
<b>Major Electives</b>		
Select nine credits from the following:		9
CRIM 190	Experimental <sup>1</sup>	
CRIM 198	Selected Topics <sup>1</sup>	
CRIM 290	Experimental <sup>1</sup>	
CRIM 298	Selected Topics <sup>1</sup>	
CRIM 302	Sexual Violence <sup>1</sup>	
CRIM 321	Criminal Justice interventions <sup>1</sup>	
CRIM 322	Criminal Justice Interventions 2 <sup>1</sup>	
CRIM 326	Victimology <sup>1</sup>	
CRIM 327	Criminal Justice and the Multicultural Community <sup>1</sup>	
CRIM 328	Transnational Crime & Justice <sup>1</sup>	
CRIM 343	Criminal Investigations <sup>1</sup>	
CRIM 360	Police and Society <sup>1</sup>	
CRIM 368	Comparative Criminal Justice Abroad <sup>1</sup>	
CRIM 370	Inside Out Views of Criminal Justice Issues <sup>1</sup>	
CRIM 380	Women & the Criminal Justice System <sup>1</sup>	
CRIM 390	Experimental <sup>1</sup>	
CRIM 398	Selected Topics <sup>1</sup>	
CRIM 402	Forensic Behavior: Crime and the Individual <sup>1</sup>	
CRIM 404	Applied Criminal Procedures <sup>1</sup>	
CRIM 405	White Collar Crime <sup>1</sup>	
CRIM 414	Criminal Justice Policy <sup>1</sup>	
CRIM 416	Community Corrections <sup>1</sup>	
CRIM 422	The Death Penalty <sup>1</sup>	
CRIM 450	Internship <sup>1</sup>	
CRIM 468	Crime & Media <sup>1</sup>	
CRIM 498	Selected Topics <sup>1</sup>	
SOWK 334	Clinical Perspectives on DSM Diagnoses <sup>1</sup>	
Subtotal		9
<b>Total Hours</b>		<b>40</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA.

<sup>2</sup> Course can be counted as a Rock Studies 2 Requirement, but earns credit only once toward your 120-credits total.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Community Corrections Concentration (Optional)

Code	Title	Hours
<b>Core Courses</b>		
CRIM 416	Community Corrections	3
PSYC 276	Introduction to Abnormal Psychology	3
or SOWK 334	Clinical Perspectives on DSM Diagnoses	
SOWK 355	Social Work Practice with Individuals	3
SOWK 356	Social work Practice with Groups & Families	3
PSYC 321	Drugs and Behavior	3
<b>Total Hours</b>		<b>15</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year long.
2. High-Impact Practice (HIP) designated classes (CRIM 343 and CRIM 370)
3. Student-faculty research
4. Student leadership opportunities – CRIM Club, Alpha Sigma Honors Society
5. Service-learning classes
6. Internships
7. Volunteering opportunities

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

CRIMINOLOGY & CRIMINAL JUSTICE - BA (5 70)  
w/optional Community Corrections Concentration (507C)

This program is effective as of Summer 2022

Revised 06.29.2022

UCC 03.05.20

## RECOMMENDED FOUR-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
Learning Community Cluster		
CRIM 110	Introduction to Criminology & Criminal Justice Systems	3
CRIM 105 or SOWK 105	Human Diversity or Human Diversity	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
CRIM 115	Proseminar	1
CRIM 253	American Policing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Social Science Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
CRIM 263	Introduction to Criminal Procedure	3
MODL 101	Modern Language Requirement	3
SCI 101	Science of Life	3
Humanities Inquiry (p. 29)		3
PSYC 105	Introduction to Psychology	3
Declare a Thematic Thread <sup>3</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
CRIM 273	American Corrections	3
CRIM 301	Theoretical Criminology	3
MODL 102	Modern Language Requirement	3
SCI 102	Understanding the Physical World	3
CRIM 317	Statistical Methods in Criminology and Criminal Justice	3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
PSYC 276 or SOWK 334	Introduction to Abnormal Psychology or Clinical Perspectives on DSM Diagnoses	3
CRIM 345	Juvenile Delinquency	3
SOWK 355	Social Work Practice with Individuals	3
Thematic Thread Requirement (p. 29)		3
MODL 103	Modern Language Requirement	3
<b>Hours</b>		<b>15</b>

### Winter

Free Elective (or Minor class)	3
<b>Hours</b>	<b>3</b>

### Spring

CRIM 318	Research Methods in Criminology and Criminal Justice	3
CRIM 416	Community Corrections (CRIM Elective (1)) <sup>2</sup>	3
SOWK 356	Social work Practice with Groups & Families	3
Thematic Thread Requirement (p. 29)		3
PSYC 321	Drugs and Behavior	3
<b>Hours</b>		<b>15</b>

### Fourth Year

#### Fall

CRIM Elective (2) <sup>2</sup>	3
CRIM Elective (3) <sup>2</sup>	3
Thematic Thread Requirement (p. 29)	3
Free Elective (or Minor Class)	3
Free Elective (or Minor Class)	3
<b>Hours</b>	<b>15</b>

#### Winter

Free Elective (or Minor class)	3
<b>Hours</b>	<b>3</b>

#### Spring

CRIM 408	Capstone: Ethics and Criminal Justice	3
Thematic Thread Requirement (p. 29)		3
Free Elective (or Minor Class)		9
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>128</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> Students' choice for CRIM electives are CRIM 190, CRIM 198, CRIM 290, CRIM 298, CRIM 321, CRIM 322, CRIM 326, CRIM 327, CRIM 328, CRIM 343, CRIM 360, CRIM 370, CRIM 380, CRIM 390, CRIM 398, CRIM 402, CRIM 404, CRIM 405, CRIM 414, CRIM 416, CRIM 422, CRIM 450, CRIM 468, CRIM 498 or SOWK 334

<sup>3</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

- CRIM BA Major requires 40 Credit Hours (31 Core+9 Elective Credits)
- Community Corrections Concentration
  - CRIM 416, PSYC 276 OR SOWK 334, SOWK 355, SOWK 356, and PSYC 321

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 5 70

Revised date: 04.21.22

## Criminology, Minor

The criminology minor is an 18-credit hour program, which provides students with an overview of criminology (the study of criminal behavior) and the criminal justice system. Specifically, it includes classes in criminological theory, policing, courts and adjudication, corrections, juvenile delinquency, and various elective courses (i.e., criminal investigations, police and society, the death penalty, crime and the media, victimology, and white-collar crime). This minor is an excellent accompaniment to majors in psychology, social work, parks and resource management, homeland security, corporate security, and chemistry.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Criminology, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/criminology-and-criminal-justice/>)

Criminology and Criminal Justice Department Page (<https://www.sru.edu/academics/colleges-and-departments/cja/departments/criminology-and-criminal-justice/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.
- Students graduating in December 2015 and thereafter may only use 6 credits from their academic major towards the completion of an academic minor.
- Minor students will require pre-requisite overrides for all 300-level CRIM courses and above. Please contact your CRIM Adviser.

Code	Title	Hours
<b>Core Requirements</b>		
CRIM 110	Introduction to Criminology & Criminal Justice Systems	3
Select one of the following:		3
CRIM 253	American Policing	
CRIM 263	Introduction to Criminal Procedure	
CRIM 273	American Corrections	
CRIM 301	Theoretical Criminology	3
CRIM 345	Juvenile Delinquency	3
<b>Electives</b>		
Select two of the following:		6
CRIM 190	Experimental	
CRIM 198	Selected Topics	
CRIM 290	Experimental	
CRIM 298	Selected Topics	

CRIM 317	Statistical Methods in Criminology and Criminal Justice
CRIM 318	Research Methods in Criminology and Criminal Justice
CRIM 321	Criminal Justice interventions 1
CRIM 322	Criminal Justice Interventions 2
CRIM 326	Victimology
CRIM 327	Criminal Justice and the Multicultural Community
CRIM 328	Transnational Crime & Justice
CRIM 343	Criminal Investigations
CRIM 360	Police and Society
CRIM 380	Women & the Criminal Justice System
CRIM 390	Experimental
CRIM 398	Selected Topics
CRIM 402	Forensic Behavior: Crime and the Individual
CRIM 404	Applied Criminal Procedures
CRIM 405	White Collar Crime
CRIM 408	Capstone: Ethics and Criminal Justice
CRIM 414	Criminal Justice Policy
CRIM 416	Community Corrections
CRIM 422	The Death Penalty
CRIM 450	Internship
CRIM 468	Crime & Media
CRIM 490	Independent Study
CRIM 498	Selected Topics

**Total Hours** **18**

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN CRIMINOLOGY (80E)

This program is effective as of Fall 2020.

Revision date: 07.08.2020

UCC 03.05.2020

## Dance

Chair	Secretary	Location	Department Phone
Ms. Nora Ambrosio	Melanie Martin	232 West Performing Arts Building	724-738-2036



Department Web Site URL (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/dance/>)

Department Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/dance-fs.pdf>)

Slippery Rock University is an accredited member of the National Association of Schools of Dance and the only Department of Dance in the State System of Higher Education.

For more information on the degree programs in the Department of Dance (BA, BFA - Performance and Choreography, BFA - Business Administration) and procedures for admission, please click here (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/dance/programs/>) and select the appropriate degree program.

## Faculty

### Nora Ambrosio

Professor

Dance

M.F.A., Smith College

B.A., University of Maryland

### Teena Custer

Instructor

Dance

### Andrew Hasenpflug

Instructor

Dance

M.M., University of Cincinnati

B.F.A., SUNY

### Jennifer Keller-Birkes

Professor

Dance

M.F.A., Arizona State University

B.A., Connecticut College

### Jaya Mani

Instructor

Dance

M.S., Slippery Rock University

B.A., University of Madras

### Ryan McMullen

Instructor

Dance

### Ursula Payne

Professor

Dance

M.F.A., Ohio State University

B.A., Slippery Rock University

### Sally Sherman

Instructor

Dance

### Melissa Teodoro

Professor

Dance

M.F.A., University of Hawaii

M.A., University of California

B.A., Pontificia Universidad Javeriana

### Lindsay Viatori

Instructor

Dance

M.F.A., University of Iowa

B.F.A., University of North Carolina School of the Arts

## Programs

### Majors

- Dance, Bachelor of Arts (BA) (p. 857)
- Dance, Bachelor of Fine Arts (BFA) - Concentration in Performance and Choreography (p. 861)
- Dance, Bachelor of Fine Arts (BFA) - Concentration in Studio Ownership and Dance Entrepreneurship (p. 865)

### Minors

- Dance: Pedagogy, Minor (p. 869)
- Dance: Performance, Minor (p. 870)

## Courses

### DANC 101 - Wellness for Dancers

The first component of this course will cover body conditioning methods, injury prevention and basic concepts of anatomy and kinesiology. Additionally this course may include, but not be limited to, nutrition, weight management, fitness and strength practices specific to the needs of the dancer. The second component of this course will cover time/stress management, study skills and an introductory approach to writing techniques and research methodologies. Students may be required to attend on-campus dance events and some may require a fee.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Dance.

### DANC 125 - Experiencing Dance: Techniques and Styles

DANC 125 is an introduction to dance and movement techniques. It will focus on establishing a basic foundation in dance with emphasis on correct alignment, technique, and the unique stylistic components of a variety of dance genres. In this course, students will develop the ability to demonstrate and synthesize technical corrections, understand the elements of dance (space, time and energy), and perceive dance as an art form. This course may include dance genres such as Modern Dance, Jazz, Ballet, Improvisation, African-Based Dance, Social Dance, and dance-related practices such as Yoga and Pilates. In addition to the technical component of the course, students will examine the historic, cultural and social contexts in which these dance styles have been developed. DANC 125 is a blended course. The dance technique component takes place in the dance studio; the lecture/research/reading/writing component takes place online. This course may be repeated up to nine credits. Prerequisites and Notes: Students may be required to attend dance events and some may require a fee.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Transfer Thread Completion Course

**DANC 130 - Dance: Art and Culture**

Studying and experiencing the arts, including dance, music, theatre, and the visual arts, develops creative and aesthetic abilities. The arts introduce students not only to artists and their creations, but also to history, cultures, values, technique, imagination, creativity, and issues relevant to society. Students will gain an understanding of the creative process and how to analyze and interpret message and meaning in works of art. While the arts can bring us pleasure, they can also serve to enlighten and illuminate critical issues, lead to personal discoveries, and foster innovation in all fields. Students will learn to think critically about the arts, develop an appreciation for artistic creations, and by viewing live performances and exhibitions, become engaged audience members. Arts inquiry courses use and develop the analytic and interpretive modes of inquiry needed to understand and explore both tangible and abstract artistic works and the cultures in which they exist. In arts inquiry courses, students confront a variety of cultural and artistic expressions in order to gain an understanding of the human condition, and ultimately express their relationship to artistic work, meaning, and the creative process. Attendance at arts events will be required during this course and may require a fee.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**DANC 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**DANC 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**DANC 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**DANC 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**DANC 199 - LMA/Performance Techniques**

This course will focus on the theoretical and practical application of Laban Movement Analysis and dance performance skills. Students will be encouraged to explore the relationship between research, concept development and personal style through the performance of original solo choreography. Students may be required to attend on and off campus dance events; some may require of fee.

Prerequisites: DANC 200<sup>D</sup> and DANC 224<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment is limited to students with a program in Dance, Dance - Performance, Dance- Business Administration, Dance or Dance: Performance.

**DANC 200 - Dance Composition I**

This course will be an introduction to the elements of dance (space, time, and energy) and to the practice, theory, and art of dance composition. Experiences in solo and ensemble compositions will focus on improvisation, and lead to understanding content, aesthetics, creating, structuring, and ultimately choreography. Students will be required to attend certain dance events for this course; some may require a fee.

Prerequisite: DANC 224<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Enrollment limited to students with department of Dance.

**DANC 216 - Principles of Dance Production**

This course provides knowledge and practical hands-on experience in the many aspects of dance production and performance. A broad range of topics will prepare students for producing their work and collaborating with other artists and disciplines. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment is limited to students with a program in Dance, Dance - Performance, Dance- Business Administration, Dance or Dance: Performance.

**DANC 220 - Modern Dance Technique: Level II**

This second level course is a furthering and continuation of setting the foundation established in DANC 125, providing students with the information and the tools needed to extend technique, skills and performance quality. Course may be repeated for a maximum of 6 credits. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Dance.

**DANC 221 - Ballet II**

This course advances students' technical and performance foundation and will allow students to expand their knowledge of ballet technique and vocabulary. Students will examine, analyze and apply technical and performance concepts relative to classical ballet and its history. This course may be repeated for a maximum of 6 credits. Course content will be different each semester. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Dance.

**DANC 222 - Jazz Dance II**

This course advances students' foundational knowledge of jazz dance by improving and refining their skills in performance, technique, and stylistic approaches to the genre. In addition to experiencing several jazz dance movement styles, students will identify, define, and analyze key concepts of jazz dance. This course may be repeated for a total of 6 credits. Course content will be different each semester. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with department of Dance.

**DANC 223 - Creative Dance for Children**

The intellectual and artistic impact of Creative Dance for Children, in both academic and studio settings serves as the primary focus of this course. Laban-based movement principles will be explored through creative and improvisational experiences leading to lesson and unit plans in dance addressing a variety of academic areas suitable for use by classroom teachers and dance specialists. Students will gain an appreciation for dance as an art form and an understanding of how dance can address several academic disciplines most appropriate for inclusion in a grade K-5 curriculum. State and national dance standards will be addressed with additional experiences in lesson planning, pedagogy and peer teaching. Additionally, basic knowledge in anatomy and body mechanics, nutrition and wellness, and an awareness of safe/unsafe practices in the home, school and community will be provided. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course

**DANC 224 - Improvisation**

This course provides the student opportunities to explore the processes of discovering, creating and performing movement spontaneously through experimental practice, creative research, and writing. Course content will vary each semester. Students will be required to attend certain dance events for this course; some may require a fee. The course may be repeated for a maximum of 6 credits.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with department of Dance.

**DANC 271 - Dance Technology**

This hands-on course will explore the interactive possibilities between the live dancer and the projected image, as well as the temporal and spatial possibilities of dance on film. Students will direct, shoot and edit original video compositions using current technology, as well as perform in a multi-media work.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment is limited to students with a program in Dance, Dance - Performance, Dance- Business Administration, Dance or Dance: Performance.

**DANC 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**DANC 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**DANC 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with department of Dance.

**DANC 299 - Dance Rehearsal and Production**

This course provides dance majors and minors the opportunity to receive credit for the numerous hours spent in rehearsals and performances. Students will select specific activities and then develop a contract for completion of responsibilities and evaluation. Tasks may include choreographer, rehearsal assistant, rehearsal and performance as a dancer, publicity or as member of the technical support staff during performance (stage manager, running crew, usher, lighting). This course requires an audition and/or permission of the faculty member of record. Both 299 and 499 may be repeated up to 4 credits.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment is limited to students with a program in Dance, Dance - Performance, Dance- Business Administration, Dance or Dance: Performance.

**DANC 300 - Dance Composition II**

This second level of dance composition will include creating choreography based on specific forms of movement and music, emotion oriented and movement oriented dances, dances utilizing props and sets, and site-specific dance. Students will be required to attend certain dance events for this course; some may require a fee.

Prerequisite: DANC 200<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Enrollment is limited to students with a program in Dance, Dance - Performance, Dance- Business Administration, Dance or Dance: Performance.

**DANC 301 - Dances of Selected Cultures**

This course is an in-depth examination of dances from selected cultures, including but not limited to: Butoh, Classical Indian Dance, African Dance, Hula, Flamenco, Hip-hop or another cultural dance. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

Enrollment limited to students with department of Dance.

**DANC 305 - Society and Social Dance**

This course will examine the relationship between social dance and the social, political and cultural climate of the society in which the specific dance forms were created and performed. Emphasis will be placed on 20th century American social dance forms and styles. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Transfer Thread Completion Course

**DANC 318 - Dance in the Political World**

Through various critical lenses, this course analyzes the choreographic production of influential dance makers in a variety of geographic areas through the present day. This course is anchored on the term choreography and its multiple meanings, ranging from orchestrated movement performed on a proscenium stage to organized movements and actions of bodies in everyday life. This course is structured to permit the student to view dance through a variety of theoretical lenses. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Transfer Thread Completion Course, United States in Global Context

**DANC 320 - Modern Dance Technique: Level III**

This third level course requires the student with an established foundation in modern dance to extend their knowledge and acquire additional understanding of technical material and performance quality. Course may be repeated for a maximum of 6 credits. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1 may **not** enroll.

Enrollment limited to students with department of Dance.

**DANC 321 - Ballet III**

This course advances the competencies gained in DANC 221; movements and combinations increase in complexity and difficulty to further extend technique and performance ability. In addition to classical ballet, contemporary ballet vocabulary and aesthetics will be introduced, along with examining theories of classical and contemporary ballet. This course may be repeated for a maximum of 6 credits. Course content will be different each semester. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1 may **not** enroll.

Enrollment limited to students with department of Dance.

**DANC 322 - Jazz Dance III**

This course advances the competencies gained in DANC 222; movements combinations build in complexity and difficulty through experiencing a broad range of jazz dance periods and styles. Students will analyze the technique and choreography of key jazz dance figures and aesthetics within the larger jazz dance continuum. This course may be repeated for a total of 6 credits. Course content will be different each semester. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1 may **not** enroll.

Enrollment limited to students with department of Dance.

**DANC 323 - Teaching of Dance**

This course is designed to introduce students to the theory and practice of sound dance teaching and ethical teaching practices. Information on critical thinking, teaching and learning styles, imagery, diversity, and assessment will be explored. Students' abilities and strengths as teachers will be assessed and evaluated throughout the semester. This course must be taken with Field Experience, DANC 350, which allows the students to have practical teaching experiences. Students will be required to attend certain dance events for this course; some may require a fee.

Prerequisites: DANC 223<sup>D</sup> and DANC 350<sup>\*D</sup> and DANC 326<sup>D</sup> (may be taken concurrently).

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with department of Dance.

**DANC 324 - Music for Dance**

This course is designed to provide students with information regarding music for dance performance, production, and accompaniment. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1 or Freshman 2 may **not** enroll.

Enrollment is limited to students with a program in Dance, Dance - Performance, Dance- Business Administration, Dance or Dance: Performance.

**DANC 326 - Dance Kinesiology**

This course includes the study of human movement specific to dance, with emphasis on the anatomical principles and the laws of physics as they apply to dance technique and performance. The course includes structural and neuromuscular analyses including individual analysis of alignment, muscular imbalances, body types, conditioning needs and movement behavior. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Dance.

**DANC 350 - Field Experience in Dance Technique**

Field Experience provides the opportunity for students to teach in private studios, recreation centers and/or the public/private school systems. To be taken concurrently with DANC 323. Students will be required to attend certain dance events for this course; some may require a fee.

Prerequisites: DANC 223<sup>D</sup> and DANC 323<sup>\*D</sup> and DANC 326<sup>D</sup> (may be taken concurrently).

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with department of Dance.

**DANC 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**DANC 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**DANC 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**DANC 399 - Repertory**

This course provides students with an in-depth experience in an aspect of scholarly research, performance experience and/or creative process. This course may be repeated for a total of 6 credits. Course content will vary each semester the course is offered. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment is limited to students with a program in Dance, Dance - Performance, Dance- Business Administration, Dance or Dance: Performance.

**DANC 419 - Dance in Contemporary Times**

This course examines specific genres and historical developments in dance in the 20th and 21st centuries. The aesthetics and philosophies of leading dance artists will be explored. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Dance, Dance - Performance, Dance- Business Administration, Dance or Dance: Performance.

**DANC 420 - Modern Dance Technique: Level IV**

This fourth level course is for the student who demonstrates a strong technical foundation, and accurately performs dance movements and combinations consistently. Course may be repeated for a maximum of 6 credits. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Dance.



**DANC 421 - Ballet IV**

This fourth level pre-professional course advances the competencies gained in DANC 321 and is for the student who demonstrates a strong technical foundation and accurately performs both classical and contemporary ballet material with consistency while implementing artistic choices. Students will connect and evaluate their understanding of the history of ballet to contemporary issues. This course may be repeated for a maximum of 6 credits. Course content will be different each semester. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Dance.

**DANC 422 - Jazz Dance IV**

This fourth level pre-professional course advances the competencies gained in DANC 322 and is for the student who demonstrates a strong technical foundation and accurately performs a broad range of jazz dance styles and repertory with consistency, personal style, and implementing artistic choices. Students will analyze the political and social undercurrent of jazz dance in America. This course may be repeated for a total of 6 credits. Course content will be different each semester. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1 or Freshman 2 may **not** enroll.

Enrollment limited to students with department of Dance.

**DANC 424 - Contemporary Partnering**

This course investigates the techniques of Contact Improvisation to develop contemporary partnering. Students will be required to attend certain dance events for this course; some may require a fee.

Prerequisite: DANC 224<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms Even

Students with a semester level of Freshman 1 or Freshman 2 may **not** enroll.

Enrollment is limited to students with a program in Dance, Dance - Performance, Dance- Business Administration, Dance or Dance: Performance.

**DANC 425 - Senior Capstone I: Dance Research**

Advanced level research, writing, and discussions will lead to the development and presentation of the student's senior project. Readings and discussions on dance philosophy, aesthetics, leadership, and arts advocacy will be the basis of this course. Practical experiences in resume and grant writing, graduate school applications, interviews, and career planning will be covered.

Prerequisite: DANC 326<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2, Junior 1, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students in the BA 5153, BFA 5353, BFA 5354 or BFA 5355 programs.

**DANC 426 - Modern Dance Technique: Level V**

This fifth level course is for students who can demonstrate total integration of technique and performance, including sensitivity to aesthetic concepts. Students will focus on the following: a continual refinement and advancement in the level and knowledge of technique, quality of performance, and aesthetic concepts; a clear understanding of dance as a profession and demonstrated professionalism and maturity. Course may be repeated for a maximum of 6 credits. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Dance.

**DANC 428 - Modern Dance Technique: Level VI**

This sixth level modern dance course is for the student who can execute technique and performance at an advanced level and knows, understands, and can demonstrate dance theory and concepts. This course is for the dancer who is at the pre-professional level. Course may be repeated for a maximum of 6 credits. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with department of Dance.

**DANC 430 - BFA Capstone II: Performance, Choreography, and Entrepreneurship**

This BFA capstone course will include advanced-level research, writing, and discussions, and will lead to the development, production, and presentation of the student's senior project. The course will include practical, theoretical, philosophical, and artistic resources applicable to a professional career in dance or related field, and include an emphasis on the University's Student Learning Outcomes.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment limited to students in the BFA 5353, BFA 5354 or BFA 5355 programs.

**DANC 450 - Dance Internship**

Supervised placement and research in an appropriate agency. For further information, contact the Department of Dance. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-9

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Dance, Dance - Performance, Dance- Business Administration, Dance or Dance: Performance.

**DANC 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**DANC 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**DANC 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Dance, Dance - Performance, Dance- Business Administration, Dance or Dance: Performance.

**DANC 499 - Dance Rehearsal and Production**

This course provides dance majors and minors the opportunity to receive credit for the numerous hours spent in rehearsals and performances. Students will select specific activities and then develop a contract for completion of responsibilities and evaluation. Tasks may include choreographer, rehearsal assistant, rehearsal and performance as a dancer, publicity or as member of the technical support staff during performance (stage manager, running crew, usher, lighting). This course requires an audition and/or permission of the faculty member of record. Both 299 and 499 may be repeated up to 4 credits.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with department of Dance.

## Dance, Bachelor of Arts (BA)

### Dance – Bachelor of Arts

The Bachelor of Arts degree in Dance provides superior education in performance, choreography, and teaching, with additional components of wellness for dance, dance technology, and intercultural experience, preparing students for their chosen profession and entrepreneurial role in society.

This nationally renowned and rigorous program provides a comprehensive dance education that is compatible with other academic disciplines for students desiring a double major. The BA in dance can be completed in four years or on a compressed 3-year accelerated schedule.

**Bachelor of Arts in Dance: 40-42 credits**

The BA program attracts a diverse population of students who are interested in a well-rounded program that allows for multiple performance and choreography opportunities, including both live and virtual (dance for the camera) performances. In addition to the many performing and choreography opportunities, Dance BA students will learn to expand and perfect artistic and research abilities through various courses in technique, performance, choreography, dance history, wellness for dance and teaching. Dance BA students complete a capstone course in the senior year, ensuring a well-rounded education relevant for dance professionals in the 21<sup>st</sup> century. Our graduates are enjoying multi-layered careers in dance, including dance company members, dance teachers and professors, independent dance artists, wellness and fitness specialists, art administrators, adaptive dance instructors, costume and lighting designers, and other related careers.

The application and synthesis of practice and theory competencies are required for employment in the dance field. It is recommended that BA students be enrolled in a minimum of one technique class per semester. Competency based assessments will be used to determine level of proficiency, advancement in technique and performance, and synthesis of knowledge. The systematic assessment procedures developed by the dance faculty were created in conjunction with the National Association of Schools of Dance standards for professional degree programs. By the end of the final year, BA dance students must demonstrate the following technical proficiency requirements:

- **Level IV in Modern Dance (required)**
- **Level III in Ballet (recommended)**
- **Level III in Jazz Dance (recommended)**

## Program Learning Outcomes

- **Choreography:** Create and organize movement into artistic and aesthetic choreography.
- **Communication and Critical Thinking:** Demonstrate the ability to communicate and think critically in the areas of performance, choreography, and teaching.
- **Cultural Diversity:** Synthesize the social, political, and artistic role of dance in world cultures.
- **Degree Program Writing Competency:** Demonstrate writing that is clear, cohesive, and relevant to the dance field, utilizing appropriate vocabulary, grammar, research, and citation methods.
- **Teaching:** Organize the knowledge, skills, aesthetics and art of dance into effective, ethical and responsible teaching practices.
- **Technique:** Demonstrate mastery of the core concepts in dance technique and performance in DANC 420 (modern dance technique IV).
- **Wellness:** Students will apply dance wellness principles in the areas of performance, teaching, and choreography.

## Related Links

Dance, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/dance-bachelor-of-arts/>)

Dance Department Page (<http://www.sru.edu/academics/colleges-and-departments/cia/departments/dance/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Modern Language Requirement	0-9
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	41-42
	Electives	37

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	

PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
Complete 0-9 credits		0-9
<b>Total Hours</b>		<b>0-9</b>

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	

CPSC 130	Introduction to Computing and Programming
PE 202	Technology for Wellness
<hr/>	
<b>Total Hours</b>	<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Dance Core</b>		
DANC 101	Wellness for Dancers <sup>1</sup>	3
DANC 199	LMA/Performance Techniques <sup>1</sup>	3
DANC 200	Dance Composition I <sup>1</sup>	3
DANC 216	Principles of Dance Production <sup>1</sup>	3
DANC 223	Creative Dance for Children <sup>1</sup>	3
DANC 224	Improvisation <sup>1</sup>	3
DANC 301	Dances of Selected Cultures <sup>1</sup>	2
DANC 323	Teaching of Dance <sup>1</sup>	3
DANC 324	Music for Dance <sup>1</sup>	3
DANC 326	Dance Kinesiology <sup>1</sup>	3
DANC 350	Field Experience in Dance Technique <sup>1</sup>	1
DANC 419	Dance in Contemporary Times <sup>1</sup>	3
DANC 420	Modern Dance Technique: Level IV <sup>1</sup>	2
DANC 425	Senior Capstone I: Dance Research <sup>1</sup>	3
Subtotal		38

### Additional Core Requirements

Select 3 or 4 credits from one of the following groups: 3-4

#### Group 1: Dance Theory and Practice (Technique)

Select two of the following courses bringing your total BA degree to 42 credit hours:

DANC 321	Ballet III <sup>1</sup>
DANC 322	Jazz Dance III <sup>1</sup>
DANC 424	Contemporary Partnering <sup>1</sup>

#### Group 2: Composition and Technology

Select one course bringing your total BA degree to 41 credit hours:

DANC 271	Dance Technology <sup>1</sup>
DANC 300	Dance Composition II <sup>1</sup>

#### Group 3: Social and Historical Perspectives

Select one course bringing your total BA degree to 42 credit hours:

DANC 305	Society and Social Dance <sup>1</sup>
DANC 318	Dance in the Political World <sup>1</sup>

Subtotal 3-4

**Total Hours** **41-42**

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Competency Based Requirements for the BA in Dance Degree Program of Study

Competency based assessments will be used to determine level of proficiency, advancement in technique and performance, and synthesis of knowledge. The systematic assessment procedures developed by the dance faculty were created in conjunction with the National Association of Schools of Dance standards for liberal arts degree programs. By the end of the final year, BA dance students must demonstrate the following technical proficiency requirements:

- **Level IV in Modern Dance (required)**
- **Level III in Ballet (recommended)**
- **Level III in Jazz Dance (recommended)**

## Co-Curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Career education and development
2. Field experiences
3. Guest artist residencies and repertory experiences
4. High-impact practice (HIP) courses and activities
5. International study programs (short-term, semester)
6. Internships
7. Residential dance companies
8. Service opportunities
9. Student-faculty research and creative projects
10. Student leadership development and opportunities
11. Summer dance intensives and workshops

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Dance - BA (5153)

This program is effective as of Fall 2020.

Revision date: 07.08.2022

UCC 03.02.2021

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
DANC 101	Wellness for Dancers	3
DANC 220	Modern Dance Technique: Level II <sup>1</sup>	2
DANC 221	Ballet II <sup>1</sup>	2
DANC 222	Jazz Dance II (Or Computer Competency Requirement)	2
SUBJ 139	Foundations of Academic Discovery <sup>2</sup>	3
ENGL 102	Critical Writing	3
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>18</b>
<b>Spring</b>		
DANC 224	Improvisation	3
DANC 216	Principles of Dance Production	3
DANC 220	Modern Dance Technique: Level II <sup>1</sup>	2
DANC 221	Ballet II <sup>1</sup>	2
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
ENGL 104	Critical Reading	3
Determine additional 3-4 credits of core requirements from one of these groups:		3-4
Dance Theory and Practice (Technique); Composition and Technology Social and Historical Perspectives. These courses will be listed as electives in upcoming semesters <sup>5</sup>		
<b>Hours</b>		<b>19-20</b>
<b>Second Year</b>		
<b>Fall</b>		
DANC 200	Dance Composition I	3
DANC 298	Selected Topics	2
DANC 320	Modern Dance Technique: Level III <sup>1</sup>	2
Select one of the following:		2-3
DANC 271	Dance Technology <sup>6</sup>	
DANC 222	Jazz Dance II	
DANC 321	Ballet III	
MATH 117	Quantitative Reasoning	3
Humanities Inquiry (p. 29)		3
Social Science Inquiry (p. 29)		3
Note: Taking more than 18 credits requires an additional fee		
Declare a Thematic Thread <sup>3</sup>		
<b>Hours</b>		<b>18-19</b>
<b>Spring</b>		
DANC 199	LMA/Performance Techniques	3
DANC 223	Creative Dance for Children	3
DANC 299 or DANC 499	Dance Rehearsal and Production or Dance Rehearsal and Production	1
DANC 320	Modern Dance Technique: Level III <sup>1</sup>	2
DANC 324	Music for Dance	3
Select one of the following:		3

DANC 305	Society and Social Dance (Thread)	
DANC 318	Dance in the Political World (Thread)	
SCI 101	Science of Life	3
<b>Hours</b>		<b>18</b>
<b>Third Year</b>		
<b>Fall</b>		
DANC 420	Modern Dance Technique: Level IV	2
Select one of the following:		2
DANC 222	Jazz Dance II (Elective) <sup>1</sup>	
DANC 321	Ballet III (Elective) <sup>1</sup>	
Select one of the following:		3-5
DANC 399	Repertory (Elective)	
DANC 499	Dance Rehearsal and Production (Elective)	
DANC 271	Dance Technology <sup>6</sup>	
DANC 300	Dance Composition II	
DANC 318	Dance in the Political World <sup>4</sup>	
DANC 424	Contemporary Partnering <sup>4</sup>	
SCI 102	Understanding the Physical World	3
Thematic Thread Requirement (p. 29)		3
Language Requirement		3
<b>Hours</b>		<b>16-18</b>
<b>Spring</b>		
DANC 326	Dance Kinesiology	3
DANC 419	Dance in Contemporary Times	3
DANC 420	Modern Dance Technique: Level IV <sup>1</sup>	2
Language Requirement		3
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
DANC 499	Dance Rehearsal and Production (Elective)	1
<b>Hours</b>		<b>18</b>
<b>Fourth Year</b>		
<b>Fall</b>		
DANC 323	Teaching of Dance	3
DANC 350	Field Experience in Dance Technique	1
DANC 425	Senior Capstone I: Dance Research	3
DANC 499	Dance Rehearsal and Production (Elective)	1
Select a Dance Technique Elective (Ballet, Contemporary Partnering, Jazz Modern)		2
Language Requirement or Dance Elective		3
Thematic Thread Requirement (p. 29)		3
<b>December Graduation</b>		
<b>Hours</b>		<b>16</b>
<b>Total Hours**</b>		<b>123-127</b>

<sup>1</sup> Proficiency Requirement

<sup>2</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>3</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>4</sup> DANC 318 and DANC 424 offered every other year



- 5
- 2nd year spring offerings: Technique OR DANC 305
  - 3rd year fall offerings: Upper Division Technique OR DANC 318 OR DANC 271/DANC 300
  - 3rd year spring offerings: Upper Division Technique OR DANC 305
  - 4th year fall offerings: Upper Division Technique OR DANC 318 OR DANC 271/DANC 300
- 6 If DANC 271 is taken, an additional 2 upper division credits must be completed in order to meet the 20 upper division required credits.
- **The BA in dance 1st majors will need to make sure they take a Rock Studies 2 Thread that has DANC 305 or DANC 318. Students will need to register for DANC 305 or DANC 318 and this will count in Rock Studies 2 and the major.** \*If dance is a student's second major then they need to select group 3: Social and Historical Perspectives to complete their requirements.
  - Proficiency Requirements allows the student to develop and demonstrate progression toward reaching departmental technique proficiency requirements and meeting performance competency accreditation standards for dance majors pursuing an undergraduate liberal arts degree.
  - Students must successfully complete DANC 420 Modern IV level competency in order to graduate.
  - Dance Elective courses provides opportunities for students to choose the coursework appropriate to their individual needs and interests; while remaining consistent with the goals and objectives of the liberal arts degree program being followed.

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

Major Code: 5153

Revision date: 08.03.2021

## Dance, Bachelor of Fine Arts (BFA) - Concentration in Performance and Choreography

The BFA (Performance and Choreography) is for the student who aspires to be a dance performer and choreographer in concert dance or the entertainment industry. In addition, this degree will prepare you for teaching different levels of students and populations in various settings. This degree provides excellent dance education and advanced training in performance, choreography, and teaching, along with additional areas of wellness for dancers, cultural dance, and dance technology.

### Bachelor of Fine Arts in Dance (Performance and Choreography): Core Credits: 65 Business Concentration Credits: 15

The BFA program with a concentration in Performance and Choreography attracts a diverse population of students who are interested in a well-rounded program that allows for multiple performance and choreography opportunities, including both live and virtual (dance for the camera) performances. In addition to the many performing and choreography

opportunities, Dance BFA students will complete courses up to the advanced level in performance, choreography, teaching, and various dance techniques. In addition, courses such as Wellness for Dancers, Dances of Selected Cultures, Dance Technology, Dance History courses, and two Senior Capstone courses ensure a well-rounded education relevant for dance professionals in the 21st century. Our graduates are enjoying a variety of careers in dance, including dance company members, dance teachers and professors, and independent dance artists. This program will prepare BFA majors for a wide range of dance careers in performance and choreography.

All BFA students must be enrolled in a minimum of one technique class per day each semester. Competency based assessments will be used to determine level of proficiency, advancement in technique and performance, and synthesis of knowledge. The systematic assessment procedures developed by the dance faculty were created in conjunction with the National Association of Schools of Dance standards for professional degree programs. By the end of the final year, BFA Performance and Choreography students must demonstrate the following technical proficiency requirements:

- **Level VI in Modern Dance**
- **Level IV in Ballet and Jazz Dance**

## Program Learning Outcomes

- **Business Proficiency for BFA students with Concentration in Business Administration:** Demonstrate proficiency in dance business enterprises.
- **Choreography:** Create and organize movement into artistic and aesthetic choreography.
- **Communication and Critical Thinking:** Demonstrate the ability to communicate and think critically in the areas of performance, choreography, and teaching.
- **Cultural Diversity:** Synthesize the social, political, and artistic role of dance in world cultures.
- **Degree Program Writing Competency:** Demonstrate writing that is clear, cohesive, and relevant to the dance field, utilizing appropriate vocabulary, grammar, research, and citation methods.
- **Teaching:** Organize the knowledge, skills, aesthetics, and art of dance into effective, ethical and responsible teaching practices.
- **Technique:** Demonstrate mastery of the core concepts in dance technique and performance in DANC 428 (modern dance technique VI).
- **Wellness:** Apply dance wellness principles in the areas of performance, teaching, and choreography.

## Related Links

Dance - Performance and Choreography, BFA Program Page (<https://www.sru.edu/academics/majors-and-minors/dance-bachelor-of-fine-arts/>)

Dance Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/dance/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide GPA Requirement

Major GPA: 3.0 or higher

Overall GPA: 2.0 or higher

Summary\*

Code	Title	Hours
Rock Studies 2 Requirements		42
Other Basic Requirements		0-3
Computer Competency		0-3
Major/Concentration Requirements		78

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

Major/Concentration Requirements

- 40 major credits must be taken at SRU or PASSHE
- 40 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Dance Core</b>		
DANC 101	Wellness for Dancers <sup>1</sup>	3
DANC 199	LMA/Performance Techniques <sup>1</sup>	3
DANC 200	Dance Composition I <sup>1</sup>	3
DANC 216	Principles of Dance Production <sup>1</sup>	3
DANC 223	Creative Dance for Children <sup>1</sup>	3
DANC 224	Improvisation <sup>1</sup>	3
DANC 300	Dance Composition II <sup>1</sup>	3
DANC 301	Dances of Selected Cultures	2
DANC 323	Teaching of Dance <sup>1</sup>	3
DANC 324	Music for Dance <sup>1</sup>	3
DANC 326	Dance Kinesiology <sup>1</sup>	3
DANC 350	Field Experience in Dance Technique <sup>1,2</sup>	1
DANC 419	Dance in Contemporary Times <sup>1</sup>	3
DANC 420	Modern Dance Technique: Level IV <sup>1</sup>	2
DANC 424	Contemporary Partnering <sup>1</sup>	2
DANC 425	Senior Capstone I: Dance Research <sup>1</sup>	3
DANC 426	Modern Dance Technique: Level V <sup>1</sup>	2
DANC 428	Modern Dance Technique: Level VI <sup>1</sup>	2
DANC 430	BFA Capstone II: Performance, Choreography, and Entrepreneurship <sup>1</sup>	3
Subtotal		50
<b>Additional Advanced Technique Proficiency</b>		
DANC 421	Ballet IV <sup>1</sup>	2

DANC 422	Jazz Dance IV <sup>1</sup>	2
Subtotal		4
<b>Historical Perspectives and Experimental Approaches:</b>		
Select two of the following: <sup>3</sup>		6
DANC 271	Dance Technology <sup>1</sup>	
DANC 305	Society and Social Dance <sup>1</sup>	
DANC 318	Dance in the Political World <sup>1</sup>	
DANC 390	Experimental <sup>1</sup>	
Subtotal		6
<b>Performance and Choreography Concentration:</b>		
Select up to 18 credits from a combination of the following courses (at least 2 credits must come from the Rehearsal and Production and Repertory block): <sup>4</sup>		18
<i>Modern III-VI</i>		
DANC 320	Modern Dance Technique: Level III <sup>5</sup>	
DANC 420	Modern Dance Technique: Level IV <sup>5</sup>	
DANC 426	Modern Dance Technique: Level V <sup>5</sup>	
DANC 428	Modern Dance Technique: Level VI <sup>5</sup>	
<i>Ballet III-IV</i>		
DANC 321	Ballet III <sup>5</sup>	
DANC 421	Ballet IV <sup>5</sup>	
<i>Jazz III-IV</i>		
DANC 322	Jazz Dance III <sup>5</sup>	
DANC 422	Jazz Dance IV <sup>5</sup>	
<i>Rehearsal and Performance, and Repertory</i>		
At least 2 credits must come from this block:		
DANC 299	Dance Rehearsal and Production (Repeatable up to 4 credits)	
DANC 399	Repertory (Repeatable up to 6 credits)	
DANC 499	Dance Rehearsal and Production (Repeatable up to 4 credits)	
<b>Electives:</b>		
DANC 271	Dance Technology	
DANC 305	Society and Social Dance	
DANC 318	Dance in the Political World	
DANC 450	Dance Internship	
DANC 490	Independent Study	
DANC 495	Workshop	
Subtotal		18
<b>Total Hours</b>		<b>78</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> Taken concurrently with DANC 323.

<sup>3</sup> One must be DANC 305 or DANC 318.

<sup>4</sup> One must be DANC 430.

<sup>5</sup> May only count once in this block

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**Note: All BFA-Performance/Choreography students are encouraged to take NLPA 220 Intro to Non-Profit Leadership; BIOL 216 Anatomy & Physiology I/Lab as Rock Studies 2 courses.**

## Concentration in Performance and Choreography (PECH)

All BFA students must be enrolled in a minimum of one technique class per day each semester. Competency based assessments will be used to determine level of proficiency, advancement in technique and performance, and synthesis of knowledge. The systematic assessment procedures developed by the dance faculty were created in conjunction with the National Association of Schools of Dance standards for professional degree programs. By the end of the final year, BFA Performance and Choreography students must demonstrate the following technical proficiency requirements:

- Level VI in Modern Dance
- Level IV in Ballet and Jazz Dance

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Career education and development
2. Field Experiences
3. Guest artist residencies and repertory experiences
4. High-Impact Practice (HIP) courses and activities
5. International study programs (short-term, semester)
6. Internships
7. Residential Dance Companies
8. Service opportunities
9. Student-faculty research and creative projects
10. Student leadership development and opportunities
11. Summer dance intensives and workshops

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Dance - BFA (5355)

Concentration in Performance and Choreography (PECH)

This program is effective as of Fall 2020.

Revision date: 07.08.2022

UCC 10.16.2021

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
DANC 101	Wellness for Dancers	3
DANC 220	Modern Dance Technique: Level II	2
DANC 221	Ballet II	2

DANC 222	Jazz Dance II	2
ENGL 102	Critical Writing	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Creative & Aesthetic Inquiry (p. 29)		3

**Hours 18**

#### Spring

DANC 216	Principles of Dance Production	3
DANC 220	Modern Dance Technique: Level II	2
DANC 221	Ballet II	2
DANC 224	Improvisation	3
DANC 299	Dance Rehearsal and Production	1
ENGL 104	Critical Reading	3

Select one of the following: 3

COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	

Computer Competency Requirement 0-1

**Hours 17-18**

#### Second Year

##### Fall

DANC 200	Dance Composition I	3
DANC 298	Selected Topics	2
DANC 320	Modern Dance Technique: Level III	2
DANC 321	Ballet III (Elective)	2
MATH 117	Quantitative Reasoning	3
Humanities Inquiry (p. 29)		3
Social Science Inquiry (p. 29)		3

Declare a Thematic Thread <sup>2</sup>

**Hours 18**

##### Spring

DANC 199	LMA/Performance Techniques	3
DANC 320	Modern Dance Technique: Level III	2
DANC 321	Ballet III	2
DANC 322	Jazz Dance III	2
DANC 324	Music for Dance	3
SCI 101	Science of Life	3

Select one of the following: <sup>3</sup> 1-3

DANC 305	Society and Social Dance (Possible Thread Requirement)	
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DANC 390	Experimental	
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**Hours 16-18**

#### Third Year

##### Fall

DANC 300	Dance Composition II	3
DANC 399	Repertory	2
DANC 420	Modern Dance Technique: Level IV	2
DANC 421	Ballet IV (Concentration Requirement)	2
DANC 424	Contemporary Partnering	2
DANC 499	Dance Rehearsal and Production	1
SCI 102	Understanding the Physical World	3

Select one of the following: <sup>3</sup> 1-3

DANC 271	Dance Technology	
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DANC 318	Dance in the Political World (Possible Thread Requirement)	
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**Hours 16-18**

##### Spring

DANC 321 or DANC 421	Ballet III or Ballet IV	2
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DANC 322 or DANC 422	Jazz Dance III or Jazz Dance IV	2
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DANC 223	Creative Dance for Children	3
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DANC 326	Dance Kinesiology	3
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DANC 419	Dance in Contemporary Times	3
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DANC 420	Modern Dance Technique: Level IV	2
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Thematic Thread Requirement (p. 29)		3
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**Hours 18**

#### Fourth Year

##### Fall

DANC 271	Dance Technology	3
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DANC 323	Teaching of Dance	3
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DANC 350	Field Experience in Dance Technique	1
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DANC 421	Ballet IV (Advanced Technique Proficiency Requirement)	2
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DANC 425	Senior Capstone I: Dance Research	3
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DANC 426	Modern Dance Technique: Level V	2
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DANC 499	Dance Rehearsal and Production	1
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Thematic Thread Requirement (p. 29)		3
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**Hours 18**

##### Spring

DANC 421	Ballet IV	2
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DANC 422	Jazz Dance IV (Advanced Technique Proficiency Requirement)	2
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DANC 428	Modern Dance Technique: Level VI (Advanced Technique Proficiency Requirement)	2
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DANC 430	BFA Capstone II: Performance, Choreography, and Entrepreneurship	3
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DANC 499	Dance Rehearsal and Production	1
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Select one of the following: 3

DANC 450	Dance Internship	
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DANC 490	Independent Study	
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DANC 495	Workshop	
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Thematic Thread Requirement (p. 29)		3
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**Hours 16**

**Total Hours\*\* 137-142**

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>3</sup> In addition, majors must complete two of the following courses: DANC 271 (Offered in Fall Semester) DANC 305 (Offered in Spring Semester), DANC 318 (Offered in Fall semester of even years), and/or DANC 390. Please work with your academic adviser to plan accordingly.

- **The BFA in dance major will need to make sure they take a Rock Studies 2 Thread that has DANC 305** (<https://catalog.sru.edu/search/?P=DANC%20305>) **or DANC 318** (<https://catalog.sru.edu/search/?P=DANC%20318>). **Students will need to register for DANC 305** (<https://catalog.sru.edu/search/?P=DANC%20305>) **or DANC 318** (<https://catalog.sru.edu/search/?P=DANC%20318>) **and this will count in Rock Studies 2 and the dance major program.** **NOTE:** DANC 305 (<https://catalog.sru.edu/search/?P=DANC%20305>) **is offered in Spring Semesters;** DANC 318 (<https://catalog.sru.edu/search/?P=DANC%20318>) **is offered in Fall semesters of even years.**
- All BFA students must progressively develop technical competencies and reach proficiency standards in Modern Dance to the highest Level of DANC 428-Modern VI in order to graduate. Additionally, BFA-PECH students must reach level IV proficiency in Ballet **and** Jazz techniques.
- Dance Elective courses provides opportunities for students to choose the coursework appropriate to their individual needs and interests; while remaining consistent with the goals and objectives of the professional undergraduate degree program being followed.

Major Code: 5153

Concentration Code: SODA

Revision date: 05.16.2022

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

## Dance, Bachelor of Fine Arts (BFA) - Concentration in Studio Ownership and Dance Entrepreneurship

The BFA (Studio Ownership and Dance Entrepreneurship) is for the student who aspires to be a dance studio owner and operator, work as a dance company manager, public relations or marketing specialist, or other dance administrative position. In addition, this degree can lead you to any entrepreneurial endeavor in concert dance or entertainment. This degree provides excellent dance education and advanced training in the business of dance, performance, choreography, and teaching, along with additional areas of wellness for dancers, cultural dance, and dance technology.

### Bachelor of Fine Arts in Dance (Dance Studio Ownership and Dance Entrepreneurship):

**Credits: 69**

**Business Concentration Credits: 9**

The BFA program with a concentration in Studio Ownership and Dance Ownership attracts a diverse population of students who are interested in a well-rounded program that has a strong business component and allows for multiple performance and choreography opportunities. In addition to business courses, Dance BFA students will complete courses up to the advanced level in performance, choreography, teaching, and various dance techniques. In addition, courses such as Wellness for

Dancers, Dances of Selected Cultures, Dance Technology, Dance History courses, and two Senior Capstone courses ensure a well-rounded education relevant for dance professionals in the 21st century. Our graduates are enjoying a variety of careers in dance, including arts administrators, dance studio owners, dance teachers, and independent dance artists. This program will prepare BFA majors for a wide range of dance entrepreneurial careers.

All BFA students must be enrolled in a minimum of one technique class per day each semester. Competency based assessments will be used to determine level of proficiency, advancement in technique and performance, and synthesis of knowledge. The systematic assessment procedures developed by the dance faculty were created in conjunction with the National Association of Schools of Dance standards for professional degree programs. By the end of the final year, BFA Dance Studio Ownership and Dance Entrepreneurship students must demonstrate the following technical proficiency requirements:

- **Level VI in Modern Dance**
- **Level IV in Ballet or Jazz Dance**

## Program Learning Outcomes

- **Choreography:** Create and organize movement into artistic and aesthetic choreography.
- **Communication and Critical Thinking:** Demonstrate the ability to communicate and think critically in the areas of performance, choreography, and teaching.
- **Cultural Diversity:** Synthesize the social, political, and artistic role of dance in world cultures.
- **Degree Program Writing Competency:** Demonstrate writing that is clear, cohesive, and relevant to the dance field, utilizing appropriate vocabulary, grammar, research, and citation methods.
- **Teaching:** Organize the knowledge, skills, aesthetics, and art of dance into effective, ethical and responsible teaching practices.
- **Technique:** Demonstrate mastery of the core concepts in dance technique and performance in DANC 428 (modern dance technique VI).
- **Wellness:** Apply dance wellness principles in the areas of performance, teaching, and choreography.

## Related Links

Dance - Studio Ownership and Dance Entrepreneurship, BFA Program Page (<https://www.sru.edu/academics/majors-and-minors/dance-bachelor-of-fine-arts/dance-bfa-major-requirements/>)

Dance Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/dance/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Major GPA: 3.0 or higher

Overall GPA: 2.0 or higher



**SUMMARY\***

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	78

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

**ROCK STUDIES 2 REQUIREMENTS**

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

**Basic Math Requirement**

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

**Computer Competency**

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

**DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT**

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

**MAJOR/CONCENTRATION REQUIREMENTS**

- 40 major credits must be taken at SRU or PASSHE
- 40 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Dance Core</b>		
DANC 101	Wellness for Dancers <sup>1</sup>	3
DANC 199	LMA/Performance Techniques <sup>1</sup>	3
DANC 200	Dance Composition I <sup>1</sup>	3
DANC 216	Principles of Dance Production <sup>1</sup>	3
DANC 223	Creative Dance for Children <sup>1</sup>	3
DANC 224	Improvisation <sup>1</sup>	3
DANC 300	Dance Composition II <sup>1</sup>	3
DANC 301	Dances of Selected Cultures	2
DANC 323	Teaching of Dance <sup>1</sup>	3
DANC 324	Music for Dance <sup>1</sup>	3
DANC 326	Dance Kinesiology <sup>1</sup>	3
DANC 350	Field Experience in Dance Technique <sup>1,2</sup>	1
DANC 419	Dance in Contemporary Times <sup>1</sup>	3
DANC 420	Modern Dance Technique: Level IV <sup>1</sup>	2
DANC 424	Contemporary Partnering <sup>1</sup>	2
DANC 425	Senior Capstone I: Dance Research <sup>1</sup>	3
DANC 426	Modern Dance Technique: Level V <sup>1</sup>	2
DANC 428	Modern Dance Technique: Level VI <sup>1</sup>	2
DANC 430	BFA Capstone II: Performance, Choreography, and Entrepreneurship	3
Subtotal		50
<b>Additional Advanced Technique Proficiency - choose one</b>		<b>2</b>
DANC 421	Ballet IV <sup>1</sup>	

DANC 422	Jazz Dance IV <sup>1</sup>	
Subtotal		2
<b>Performance, Choreography &amp; Entrepreneurship Electives</b>		
Select up to 8 credits from any combination of the following courses (at least 2 credits must be Rehearsal and Production (299/499) and/or Repertory (399):		8
DANC 299	Dance Rehearsal and Production <sup>1</sup>	
DANC 321	Ballet III	
DANC 322	Jazz Dance III	
DANC 399	Repertory <sup>1</sup>	
DANC 450	Dance Internship	
DANC 490	Independent Study	
DANC 495	Workshop	
DANC 499	Dance Rehearsal and Production <sup>1</sup>	
Subtotal		8
<b>Historical Perspectives and Experimental Approaches:</b>		
Select two of the following:		6
DANC 271	Dance Technology <sup>1</sup>	
DANC 305	Society and Social Dance <sup>1</sup>	
DANC 318	Dance in the Political World <sup>1</sup>	
DANC 390	Experimental <sup>1</sup>	
Subtotal		6
<b>Studio Ownership and Dance Entrepreneurship Concentration:</b>		
Select three of the following:		9
ACCT 209	Financial Accounting	
COMM 231	Principles of Integrated Marketing Communication & Public Relations	
COMM 307	Social Media	
MGMT 341	Organizational Leadership	
MGMT 351	Organizational Behavior	
MGMT 370	Sustainable Entrepreneurship and Innovation	
MRKT 230	Principles of Marketing	
NLPA 305	Financial Best Practices for Decision Makers	
Subtotal		9
<b>Elective</b>		
Select one of the following:		3
COMM 228	Principles of Creative Advertising	
COMM 235	Introduction to Digital Design	
COMM 407	Social Media Network Analytics	
ENGL 429	Grant and Proposal Writing	
MRKT 332	Business Marketing	
MRKT 333	Consumer Behavior	
NLPA 325	Social and Ethical Issues in Philanthropy and Fundraising	
<b>Total Hours</b>		<b>78</b>

- <sup>1</sup> Course counts for 50% of Major requirements and Major GPA
- <sup>2</sup> Taken concurrently with DANC 323.
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## CO-CURRICULAR AND EXPERIENTIAL LEARNING

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Career education and development
2. Field Experiences
3. Guest artist residencies and repertory experiences
4. High-Impact Practice (HIP) courses and activities
5. International study programs (short-term, semester)
6. Internships
7. Residential Dance Companies
8. Service opportunities
9. Student-faculty research and creative projects
10. Student leadership development and opportunities
11. Summer dance intensives and workshops

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Dance - BFA (5355)

Concentration in Studio Ownership and Dance Entrepreneurship (SODE)

This program is effective as of Fall 2021

Revised 04.16.2022

UCC 10.21.2022

## RECOMMENDED FOUR-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
DANC 101	Wellness for Dancers	3
DANC 220	Modern Dance Technique: Level II	2
DANC 221	Ballet II	2
DANC 222	Jazz Dance II	2
ENGL 102	Critical Writing	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Creative & Aesthetic Inquiry (p. 29)		3
<b>Hours</b>		<b>18</b>
<b>Spring</b>		
DANC 216	Principles of Dance Production	3
DANC 220	Modern Dance Technique: Level II	2
DANC 221	Ballet II	2
DANC 224	Improvisation	3
DANC 299	Dance Rehearsal and Production	1
ENGL 104	Critical Reading	3

Select one of the following:	3
COMM 200 Civil Discourse: Theory & Practice	
PHIL 110 Ethics and Civil Discourse	
POLS 235 Civil Discourse and Democracy	
Computer Competency Requirement	0-1
<b>Hours</b>	<b>17-18</b>

**Second Year****Fall**

DANC 200 Dance Composition I	3
DANC 301 Dances of Selected Cultures	2
DANC 320 Modern Dance Technique: Level III	2
DANC 321 Ballet III (Elective) <sup>5</sup>	2
MATH 117 Quantitative Reasoning	3
Humanities Inquiry (p. 29)	3
Social Science Inquiry (p. 29)	3
Declare a Thematic Thread <sup>2</sup>	
<b>Hours</b>	<b>18</b>

**Spring**

DANC 199 LMA/Performance Techniques	3
DANC 322 Jazz Dance III	2
DANC 321 Ballet III <sup>5</sup>	2
DANC 320 Modern Dance Technique: Level III	2
DANC 324 Music for Dance	3
Required Studio Ownership Dance Entrepreneurship Course <sup>4</sup>	3
Select one of the following: <sup>3</sup>	1-3
DANC 305 Society and Social Dance (Possible Thread Requirement)	
DANC 390 Experimental	
DANC 399 Repertory <sup>5</sup>	
SCI 101 Science of Life	3

\*Additional credits beyond 18 require an extra fee

<b>Hours</b>	<b>19-21</b>
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**Third Year****Fall**

DANC 420 Modern Dance Technique: Level IV	2
DANC 421 Ballet IV (Concentration Requirement)	2
DANC 424 Contemporary Partnering <sup>6</sup>	2
DANC 300 Dance Composition II	3
Required Studio Ownership Dance Entrepreneurship Course <sup>4</sup>	3
Select one of the following: <sup>3</sup>	1-3
DANC 271 Dance Technology	
DANC 318 Dance in the Political World (Possible Thread Requirement)	
Thematic Thread Requirement (p. 29)	3
<b>Hours</b>	<b>16-18</b>

**Spring**

DANC 326 Dance Kinesiology	3
DANC 419 Dance in Contemporary Times	3
DANC 420 Modern Dance Technique: Level IV	2
DANC 422 Jazz Dance IV	2
or DANC 421 or Ballet IV	
DANC 223 Creative Dance for Children	3

DANC 399 Repertory <sup>5</sup>	2
Required Studio Ownership Dance Entrepreneurship Course <sup>4</sup>	3
<b>Hours</b>	<b>18</b>

**Fourth Year****Fall**

DANC 323 Teaching of Dance	3
DANC 350 Field Experience in Dance Technique	1
DANC 425 Senior Capstone I: Dance Research	3
DANC 426 Modern Dance Technique: Level V	2
DANC 421 Ballet IV (Advanced Technique Proficiency Requirement)	2
DANC 499 Dance Rehearsal and Production	1
Thematic Thread Requirement (p. 29)	3
SCI 102 Understanding the Physical World	3
<b>Hours</b>	<b>18</b>

**Spring**

DANC 428 Modern Dance Technique: Level VI (Advanced Technique Proficiency Requirement)	2
DANC 422 Jazz Dance IV (Advanced Technique Proficiency Requirement)	2
DANC 430 BFA Capstone II: Performance, Choreography, and Entrepreneurship	3
Required Studio Ownership Dance Entrepreneurship Course <sup>4</sup>	3
Thematic Thread Requirement (p. 29)	3
Thematic Thread Requirement (p. 29)	3
Optional Performance, Choreography & Entrepreneurship Electives: <sup>5</sup>	1
DANC 450 Dance Internship	
DANC 490 Independent Study	
DANC 499 Dance Rehearsal and Production	

<b>Hours</b>	<b>17</b>
<b>Total Hours**</b>	<b>141-146</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>3</sup> In addition, majors must complete two of the following courses: DANC 271 (Offered in Fall Semester) DANC 305 (Offered in Spring Semester), DANC 318 (Offered in Fall semester of even years), and/or DANC 390. Please work with your academic adviser to plan accordingly.

#### 4 **Studio Ownership and Dance Entrepreneurship Concentration**

\*\*Select three of the following:

- ACCT 209** Financial Accounting
- MRKT 230** Principles of Marketing
- COMM 231** Intro to PR and Integrated Marketing
- MGMT 351** Organizational Behavior
- BUSA 370** Sustainable Entrepreneurship and Innovation
- MGMT 341** Organizational Leadership
- NLPA 305** Financial Best Practices for Decision Makers
- COMM 307** Social Media

\*\*\*Select one of the following:

- COMM 228** Principles of Creative Advertising 1
- COMM 235** Introduction to Digital Design
- NLPA 325** Philanthropy and Resource Development
- MRKT 332** Business Marketing
- MRKT 333** Consumer Behavior
- COMM 407** Social Media 2: Analytics and Strategies
- ENGL 429** Grant and Proposal Writing

5 Need 8 credits from any combination of the following courses (at least 2 credits must be Rehearsal and Production (299/499) and/or Repertory (399): DANC 299 DANCE 321, DANCE 322, DANC 399, DANC 450, DANC 490 DANC 495 DANC 499

6 DANC 424 is offered fall semester of even years.

- All BFA students must progressively develop technical competencies and reach proficiency standards in Modern Dance to the highest Level of DANC 428-Modern VI in order to graduate. Additionally, BFA-SODE students must reach level IV proficiency in Ballet **OR** Jazz techniques.
- Dance Elective courses provide opportunities for students to choose the coursework appropriate to their individual needs and interests; while remaining consistent with the goals and objectives of the professional undergraduate degree program being followed.

Major Code: 5153

Concentration Code: SODA

Revision date: 06.10.2022

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

## Dance: Pedagogy, Minor

The Dance Pedagogy Minor prepares you to integrate the teaching of dance into educational scenarios in the public or private sectors. Courses such as Wellness for Dancers, Creative Dance for Children, Teaching of Dance and Dance Composition, among other courses, will equip you with the necessary tools to be an effective, safe, and knowledgeable dance teacher. Graduates with this minor may pursue careers in dance studios, pre-schools, elementary and middle schools, specialized arts camps, fitness centers, and youth and community centers. Students who major in Education, Psychology, Exercise Science, Theatre, Communication, Business Administration, Art and Music, among others, have successfully completed the Dance Pedagogy Minor and integrated their skills and knowledge into their professions. An audition is required for acceptance to the Dance Pedagogy Minor.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Dance: Pedagogy, Minor Program Page ([https://www.sru.edu/academics/majors-and-minors/dance-pedagogy-\(minor\)/](https://www.sru.edu/academics/majors-and-minors/dance-pedagogy-(minor)/))

Dance Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/dance/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.00 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 3 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Core Requirements</b>		
DANC 130 or DANC 305	Dance: Art and Culture Society and Social Dance	3
DANC 101	Wellness for Dancers	3
DANC 125	Experiencing Dance: Techniques and Styles	3
DANC 200	Dance Composition I	3
DANC 223	Creative Dance for Children	3
DANC 224	Improvisation	3
DANC 323	Teaching of Dance <sup>1</sup>	3
DANC 350	Field Experience in Dance Technique	1
<b>Electives</b>		
Select 2 credits from the following:		2
DANC 220	Modern Dance Technique: Level II	
DANC 221	Ballet II	
DANC 222	Jazz Dance II	
DANC 301	Dances of Selected Cultures	
DANC 320	Modern Dance Technique: Level III	
DANC 321	Ballet III	
DANC 322	Jazz Dance III	
<b>Total Hours</b>		<b>24</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

<sup>1</sup> Highly recommended that students register for a dance technique class (DANC 220, DANC 221, DANC 222, DANC 298, DANC 320, DANC 321, or DANC 322) while completing this requirement.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report

and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN DANCE: PERFORMANCE (62B)

This program is effective as of Fall 2020

Revision date: 11.23.2022

UCC 09.21.21

## Dance: Performance, Minor

The Dance Performance Minor enhances knowledge and execution of dance technique and performance. Studio practice classes in Modern Dance, Jazz Dance, Ballet, Improvisation, and Classical Indian Dance, among others, will prepare the student with a foundation of technical and creative tools needed to succeed in Musical Theatre and other areas. This minor is open to any student interested in furthering their technical and performance level in dance, and is particularly popular among BFA students in Musical Theatre. Graduates with this minor may pursue careers in Musical Theatre and other performance opportunities, dance studio teaching, and dance in the community. An audition is required for acceptance to the Dance Performance Minor.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Dance: Performance, Minor Program Page ([https://www.sru.edu/academics/majors-and-minors/dance-performance-\(minor\)/](https://www.sru.edu/academics/majors-and-minors/dance-performance-(minor)/))

Dance Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/dance/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.00 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 3 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Core Requirements</b>		
DANC 130	Dance: Art and Culture	3
DANC 125	Experiencing Dance: Techniques and Styles	3
DANC 224	Improvisation	3
DANC 305	Society and Social Dance	3
<b>Electives</b>		
Select eight credits from the following:		8
DANC 220	Modern Dance Technique: Level II	
DANC 221	Ballet II	
DANC 222	Jazz Dance II	

DANC 301	Dances of Selected Cultures
DANC 320	Modern Dance Technique: Level III
DANC 321	Ballet III
DANC 322	Jazz Dance III
DANC 399	Repertory
DANC 422	Jazz Dance IV
DANC 499	Dance Rehearsal and Production
<b>Total Hours</b>	<b>20</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN DANCE: PERFORMANCE (62A)

This program is effective as of Fall 2020

Revision date: 11.22.2022

UCC 09.21.2021

## Gender Studies

Chair	Location	Department Phone
Dr. Cindy LaCom	110 Patterson Hall	724-738-2359

Department Web Site URL (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/gender-studies/>)

Gender Studies considers how gender, along with race, class, sexualities, disability and ethnicity, shape access to and exclusion from power in an interdisciplinary context.

The Gender Studies Program takes an interdisciplinary approach to teaching and learning, with courses in numerous departments: English, EGEO, Psychology, History, and Political Science, among others. Relevant to all majors, a minor in Gender Studies prepares students both to interact in a diverse and increasingly global professional world and to understand how our embodied experiences, while personal and individual, are also culturally shaped. In Gender Studies courses, students analyze power structures, gender identities, and culture to promote social change.

## Programs

### Majors

- Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Gender and Diversity Studies - Rock Studies (p. 1029)



## Minors

- Gender Studies, Minor (p. 1023)

## Courses

### **GNDR 115 - Introduction to Gender Studies**

Introduction to Gender Studies is an interdisciplinary course that offers a foundation for an intersectional analyses of gender within the context of systems and structures of power and oppression.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

### **GNDR 120 - Introduction to the Study of Masculinities**

This course proposes to introduce and explore the topic of masculinity as a subject for critical study. In the course, students will read about and discuss how masculinities are constructed, presented and reproduced in media and popular culture. This course is meant for and open to everyone interested in taking a critical approach to the study of gender in societies, with specific focus on how (especially american) masculinities shape and are shaped by identity, culture, media, war, politics and economics.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

Thematic Thread(s): Transfer Thread Completion Course

### **GNDR 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

### **GNDR 180 - Disability and Social Justice**

This course focuses broadly on elements of disability to analyze and deconstruct the history, politics, and culturally influenced production of "disability" and of disablement as a social justice concern.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

### **GNDR 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

### **GNDR 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

### **GNDR 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

### **GNDR 280 - Introduction to Disability Studies**

An introduction to the field of Disability Studies, which rejects medical paradigms and instead analyzes disability as a social, cultural and ideological phenomenon, with an intersectional and interdisciplinary focus on gender, race and socioeconomic status.

Credits: 3

### **GNDR 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

### **GNDR 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

### **GNDR 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

### **GNDR 340 - Applied Queer Studies**

An introduction to the field of queer studies with an applied focus (on gender, race, disability, age, ethnicity, transactional issues) in an intersectional and interdisciplinary context. The course analyzes the historical, cultural, political and discursive production of LGBTQAI+ identities, heteronormativity as a form of control, and LGBTQAI+ activism and advocacy.

Prerequisite: GNDR 115<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

**GNDR 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GNDR 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GNDR 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GNDR 400 - Gender Studies and Porn Culture**

Integrating feminist, sociological, media, marketing, neurological, and philosophical perspectives, the course analyzes the social implications of porn consumption, porn production and methods of porn distribution, including technological developments (for example, 3D software development and the use of artificial intelligence in sex dolls). While gender organizes the analytic approaches of the course, it considers other embodied and intersectional identities as well.

Prerequisite: GNDR 115<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

**GNDR 415 - Feminist Perspectives in the Disciplines**

This course will explore feminist approaches to pedagogy and research in the humanities, social sciences, and natural sciences, highlighting how such approaches reshape and redirect the ways knowledge is constructed as well as the attendant, transformed results.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GNDR 450 - Gender Studies Internship**

Professional experiences, such as working with the Girl Scouts or state National Organization for Women (NOW), or working in a women's center or abuse/sexual assault center, that will allow students to either apply or function within a feminist framework to understand the complexity of women's lives and contribute to women's opportunities.

Credits: 1-12

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GNDR 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GNDR 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GNDR 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## History

Chair	Secretary	Location	Department Phone
Dr. William Bergmann	Lori Marttala	303 Spotts World Culture Building	724-738-2053
Department Web Site URL ( <a href="http://www.sru.edu/academics/colleges-and-departments/cla/departments/history/">http://www.sru.edu/academics/colleges-and-departments/cla/departments/history/</a> )			
Department Fact Sheet URL ( <a href="https://www.sru.edu/documents/programs/factsheets/undergraduate/history-fs.pdf">https://www.sru.edu/documents/programs/factsheets/undergraduate/history-fs.pdf</a> )			

Department Email: [SRUhistorydept@sru.edu](mailto:SRUhistorydept@sru.edu)

## Faculty

**William Bergmann**

Associate Professor

History

Ph.D., University of Cincinnati

M.A., University of Cincinnati

B.A., Franklin and Marshall College

**Aaron Cowan**

Professor  
History  
Ph.D., University of Cincinnati  
M.A., University of Cincinnati  
M.A., Kings College  
B.A., Kings College

**Melissa Ford**

Associate Professor  
History  
Ph.D., Saint Louis University  
M.A., Saint Louis University  
B.A., Wellesley College

**Daniel Graham**

Instructor  
History  
Ph.D., Catholic University of America  
M.A., Catholic University of America  
B.A., University of Maryland

**Alan Levy**

Professor  
History  
Ph.D., University of Wisconsin at Madison  
M.A., University of Wisconsin at Madison  
B.A., Washington and Jefferson College

**Lia Paradis**

Professor  
History  
Ph.D., State University of New Jersey-Rutgers  
B.S., Hunter College of the City-University of New York

**Thomas Percy**

Professor  
History  
Ph.D., University of Miami  
M.A., Purdue University  
B.A., Purdue University

**Eric Tuten**

Assistant Professor  
History  
Ph.D., University of Utah  
M.A., University of Utah  
B.A., Brigham Young University

**Carlis White**

Associate Professor  
History  
Ph.D., University of Illinois  
M.A., University of Illinois  
M.D., Southern Baptist Theological Seminary  
B.A., Johnson Bible College

## Programs

### Majors

- History, Bachelor of Arts (BA) (p. 882)

### Minors

- European History, Minor (p. 881)
- General History, Minor (p. 882)
- Non-Western History, Minor (p. 886)
- United States History, Minor (p. 886)

### Certificates

- Applied History, Certificate (p. 880)

## Courses

**HIST 051 - Discussion**

This is a laboratory experience associated with Ancient and Medieval World HIST 151.

Credits: 0

**HIST 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**HIST 151 - Ancient World to the Age of Global Encounters**

This course surveys civilizations across the globe from the earliest developments in Mesopotamia to the complex global interactions of the 17th Century. Students will explore the origins of human societies and the evolution of their development over centuries. Some of the areas covered will include classical world of Ancient Greece and Rome, the religious and cultural development of Asian during the Axial Age, the birth of Christianity and Islam, the age of Exploration, and the Columbian Exchange.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Institutions & Human Innovations, Transfer Thread Completion Course

**HIST 152 - Early Modern to Contemporary World**

This course surveys world events from the expansion of European and Asian empires in the 17th Century to the end of the 20th Century. Students will explore historical documents to engage with people and events and gain a better understanding of the interconnections between the development of various societies across the globe.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

**HIST 180 - Spotlight on the Past**

Students examine a historical moment or theme using the sources and methodologies of humanities disciplines. They consider how people asked questions and sought answers to the challenges of the human condition then and now. Each section of this course focuses on a different topic. Refer to section descriptions when registering.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**HIST 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HIST 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**HIST 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HIST 201 - Colonial US to the Civil War Era**

This course is a survey of US History from the earliest records to the Civil War Era. Students will engage with historical texts to explore topics that have shaped the nation that the United States has become. These can include: Indigenous cultures that formed America's first permanent societies, the arrival of European colonists, the origins of slavery, the American Revolution, Westward expansion, sectional divisions over slavery, and the Civil War.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

**HIST 202 - US Civil War Era to Present**

This course surveys US History from the 1860s to the present day. Topics may include: sectional division over slavery, the Civil War, Reconstruction, industrialization, Progressivism, the two world wars, and the Cold War.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

**HIST 205 - The Historian's Craft**

This course introduces students to the essential skills associated with historical research and writing, as well as a survey of various historical philosophies, historiography, and careers for history majors.

Prerequisites: HIST 151 (may be taken concurrently)<sup>D</sup> and HIST 152<sup>\*D</sup> and HIST 201<sup>\*D</sup> and HIST 202<sup>\*D</sup> (may be taken concurrently).

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**HIST 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HIST 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**HIST 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HIST 304 - American Military History**

A survey of the development of all branches of the American military spanning the colonial period to present day. The course includes a brief introduction to the development of the western way of war from pre-Hellenistic conflict through the middle ages in Europe. Technological innovation, evolution of tactical through strategic levels of warfare, and the symbiotic relationship between military development, national policy, and societal expectations will be examined.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 305 - Russia to 1855**

A social, political and cultural history from ancient times to the death of Nicholas I.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 306 - Russia Since 1855**

Continuity and change in Russia from the reign of Alexander II through the Soviet period.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 313 - U.S. Manhood and Masculinities**

An examination of expressions of manhood in American History from the colonial era to the present. Through the use of gender as a category of historical analysis, students will study notions of manhood in social relations, sexuality, the economy and politics.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 318 - Gender and Sexuality in European Society**

This course examines gender and sexuality in European society with emphasis on the relationship between ideas about gender and sexuality and their social and cultural manifestations.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 319 - History of Women to 1750**

An analysis of women from the earliest civilizations to 1750 through the examination of the lives of ordinary and outstanding women from different levels of the social order.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 320 - History of Women from 1750 to the Present**

This course will examine the role of women in the period 1750 to present from a cross-cultural perspective. Through the use of gender as a category of historical analysis and with particular reference to socio-economic differences, we will study the participation of women in the emergence of new national-states; the history of women's labor in the household and the work place, the contribution of women in intellectual life, and the participation of women in the social/political reform movements of the modern era.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 323 - African American History to 1876**

To investigate, discuss and debate the historical experience of African Americans from their origins in West Africa, through the Middle Passage and the Plantation, to the 15th Amendment and the Sell-Out of 1876.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 324 - African American History Since 1876**

The historical experiences of African Americans from the collapse of the Reconstruction and the emergence of Booker T. Washington, through the NAACP, UNIA, and the Harlem Renaissance, to the rise of the Nation of Islam, CORE, SCLC, and the election of 1976.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 326 - The Long Civil Rights Movement**

Examines Black social movements, organizations, and civil rights court decisions in the United States from 1900 to the present.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 331 - England to 1689**

Celts, Anglo-Saxons, Danes, and Normans in the formation of a nation, the medieval period, and the Tudor and Stuart centuries.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**HIST 332 - Britain Since 1689**

This course investigates key events and individuals in British history since the Glorious Revolution.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 333 - Medieval Church**

This course examines the medieval church and society with particular emphasis on the ways in which medieval men, women and institutions defined and applied the concepts of sanctity and heresy.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 335 - Outstanding Americans**

A biographical approach to the study of American history. A study is made of the lives of those Americans who have made a contribution to society outside of politics.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 336 - American Economic History**

American economic development with an emphasis on commerce, industry, labor, finance and governmental participation.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 337 - Native American History**

Histories and cultures of Indigenous peoples of North American from the pre-contact period to the present.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 343 - Public History**

This course is intended to introduce students to the practices and theory of public history. Students will gain an understanding of museums, historic preservation, archives, documentary film, and many other methods of preserving and presenting historical content outside the classroom.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 344 - The American City**

This course explores the history of American cities from the colonial period through the present day, with particular emphasis on the late 19th and 20th centuries. Examines the formation and evolution of the physical urban environment; the city as a site of race, class, and ethnic interactions; urban political, economic, and cultural evolution; transportation and suburbanization; and the consequences of the "urban crisis" of the post-World War II era.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Cultural Literacy & Community Building, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 346 - Rise of Imperial Britain**

This course is a study of key events, people and trends that shaped British history from the Act of Union that brought England, Scotland, Wales and Ireland together into a single nation, until the eve of WWI. This course will use literature, film, art and primary source documents, as well as textbooks to examine Britain's rise to be the largest and most powerful empire in the world.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 347 - Twentieth Century British Culture**

This course is a study of key events, people and trends that shaped British culture throughout the Twentieth Century. The course will focus on such moments as the two world wars, decolonization and the rise of a multi-racial populace. It will provide the historical narrative and then analyze the cultural impact through the use of film, television, art, theater, photography and music.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 350 - The American Civil War**

An examination of the causes, conduct, and consequences of the American Civil War with emphasis given to its political, constitutional, economic, military, and social ramifications.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 351 - Latin America to 1830**

Political, economic, and social development of the Spanish and Portuguese colonies in America, culminating in the winning of national independence.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 352 - Latin America Since 1830**

Developing countries of Latin America, their internal problems, international relations and historic evolution to the present.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 353 - History of the Americas**

A study of the American republics and their interactions from the colonial era to the present. Students will begin their study by examining the rise and decline of the Spanish, Portuguese, Dutch, French and British empires in the New World. Having considered many of the legacies bequeathed to the new American republics by their colonial heritage, students can then examine how those legacies have affected inter-American relations for the last two centuries.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 358 - American Popular Culture, 1865 to the Present**

An interdisciplinary course, involving American literature, philosophy, the fine and performing arts, sports and politics, which examines characteristics and patterns in American popular culture and institutions. Studies will focus on how the creative life of selected Americans and their institutions inform the nature of the evolving cultures in different eras in American history and how they continue to shape the nation and its diverse peoples, values and mores.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 362 - Africa North of the Zambezi**

Language groups, migrations of peoples, external influences, colonialism, and the emergence of independent states.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 363 - Southern Africa**

The Republic of South Africa and the High Commission Territories of Bechuanaland, Swaziland, and Basutoland, including colonialism, imperialism, war, and reconstruction in the 19th and 20th centuries.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 364 - History of Medicine**

This course will trace the history of medical philosophy and practices. It will examine the vast variety of efforts to amend human suffering and extend life through human intervention. The course is concerned with medicinal approaches throughout the span of human development and across the globe.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 370 - History and the Bible**

The history of the eastern Mediterranean area from 1800 B.C.-100 A.D. with a study of the Old and New Testaments in order to evaluate their historical validity.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 371 - History of Jews**

A course surveying Jewish life and thought from early Roman times to the present. Four thousand years of Jewish participation in most world civilizations are examined, and religious, philosophical, and literary contributions are analyzed.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 376 - Modern Japan**

This course investigates the history of the Japanese people from the beginning of the nineteenth century to the present.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 380 - Egyptology**

A study of the history and culture of ancient Egypt from the old kingdom through the new kingdom. The methods and disciplines utilized in the study of an ancient culture will be analyzed and evaluated.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 381 - East Asian Military Traditions**

This course examines the factors that have distinguished East Asian military practices from the fifth century BCE to modern times.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 382 - Modern Asian Pacific Rim**

This course examines the political, social, economic, technological and cultural factors that have affected the Asian Pacific Rim's evolution into the most economically dynamic region of the world today.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 386 - Modern China**

In this course we investigate the history of modern China, the major factors that influenced its course, the values that operate in Chinese society today as well as its fast ascent to major international importance.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 404 - Violence in Post-45 Europe**

This course focuses on three case studies of violence in Europe in the post-WWII era: 1. Displaced Persons and the refugee crisis as a result of the collapse of governments at the end of the war; 2. The sectarian violence in Northern Ireland between 1968 and 2000; and 3. The wars in the Balkans in the 1990s.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 406 - Mass Killing and Genocide in the Modern World**

In this course, we will explore through readings, films, discussion and internet the troubling and complex topics of mass killing (massacre) and genocide in the modern world, both vexing issues that continue to plague us into the twenty-first century and that no doubt we will face into the foreseeable future. We will examine definitions of terms and the long-term historical context(s) for mass killing/genocide, then we will consider specific cases of mass killing and genocide worldwide.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Cultural Literacy & Community Building, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**HIST 411 - Digital History**

This course will explore the ways in which digital technologies are changing how historians think about, research and present the past; topics may include digital publishing, visualizations, geospatial mapping, text mining and digitization of historical documents and artifacts.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**HIST 422 - Ancient Greece**

This course examines the history of ancient Greece, from the rise of its city-states to the Hellenistic world created by Alexander the Great's conquests. In addition to surveying major events, significant persons, and intellectual achievements, additional emphasis will be given to examining contributions to modern concepts of participatory government and intellectual constructs.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 423 - Ancient Rome**

This course examines the history of Ancient Rome, from its origins ca. 800 BCE to its "fall" traditionally dated ca. 476 CE. In addition to surveying major events and significant persons during its Regnal, Republican and Imperial Periods, emphasis will be given to examining Roman culture and political development as antecedents to modern institutions.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 424 - The Middle Ages**

This course investigates the major political, social, and intellectual developments of Western Europe during the Middle Ages, 500 to 1500.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 426 - French Revolution and Napoleon**

French political, social, and economic affairs in the 18th century, the French Enlightenment, the Revolution, and the Napoleonic period.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 427 - Nineteenth Century Europe**

From the Congress of Vienna to the outbreak of World War I, examining nationalism, liberalism, the response to industrialism, imperialism, the rise of the alliance system, and the breakdown of nineteenth century order.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Cultural Literacy & Community Building, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 435 - Pennsylvania**

The founding and growth of Pennsylvania to the present.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 437 - The American West**

This course examines the history of diverse groups that have resided in the American West since the sixteenth century—Native Americans, Spanish, Mexicans, and citizens of the United States. Topics include the role of the United States government in the conquest, economic development, and administration of the West; the legacy of that conquest for native and immigrant peoples; the formation of distinctive Western communities; contests for access to natural resources and wealth; and the idea of the mythic frontier in American culture.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 445 - Americans and the Environment**

This course surveys the environmental history of North America from pre-columbian societies until the present, exploring how the environment has influenced America's social, political, economic and cultural development, as well as how human activity and ideas have shaped nature.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 450 - History Internship**

Supervised placement and research in selected public and private agencies at appropriate institutions.

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 453 - American Constitutional History and Law**

Federal constitution by the Supreme Court, including the growth of constitutional law and political, social, economic, and technological changes.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 454 - Research and Writing Seminar**

This class is the capstone course for all history majors. In it, students will have the opportunity to synthesize their learning in the history program. They will apply content knowledge and use the research and writing skills they have learned. Students will produce a major research paper based on both primary and secondary sources.

Prerequisite: HIST 205<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students in the BA 5 44 program.

**HIST 462 - The Contemporary Middle East**

The economic, social, cultural, and political aspects of the Middle East in the perspective of the past.

Credits: 3  
Term(s) Typically Offered: Offerings Vary  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 463 - Israel-History, State and Society**

In this course, we will examine the following topics: the development of Zionism and the circumstances in the Jewish Diaspora that led to the call for a "Jewish" state; the British Mandate for Palestine, 1920-1948; the establishment of Israel; Israeli state and society, 1948 to present; and Israel within the broader context of the modern Middle East.

Credits: 3  
Term(s) Typically Offered: Offerings Vary  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 464 - The Scientific Revolution of the 17th and 18th Centuries**

The Scientific Revolutions of the 17th and 18th centuries is a survey of the changes and developments in Western science from antiquity to the brink of the Industrial Revolution. The course investigates the origins, transmission and development of scientific ideas and the appearance and impact of new intellectual communities in Western Europe.

Credits: 3  
Term(s) Typically Offered: Offerings Vary  
Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 490 - Independent Study**

For history majors or advanced students with a background in history. Prerequisites: QPA of 2.750 in history and permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3  
Term(s) Typically Offered: Offered as Needed  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6  
Term(s) Typically Offered: Offered as Needed  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3  
Term(s) Typically Offered: Offered as Needed  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**Applied History, Certificate**

The job market in public history and historical tourism is growing rapidly. This is most easily seen in the emergence of specialized museums and living history centers, but also as a growing component of governmental services, including the national parks service and census bureau, local and state public space development and, most recently, through interactive web and app development. These occupations demand individuals who have an understanding of how to develop and apply historical knowledge and data in new and innovative ways. This certificate is specifically designed to provide students a foundation in the interaction between history and public consumption that will improve opportunities for employment.

For more information, please contact: Dr. Aaron Cowan

To access Certificate Requirements, please view the Curriculum Guide tab.

**Related Links**

- Applied History, Certificate Program Page (<https://www.sru.edu/academics/certificates/applied-history-certificate/>)
- History Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/history/>)
- Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

**Curriculum Guide**

**GPA Requirement**

Certificate GPA: 2.0 or higher

**Certificate Requirements**

Code	Title	Hours
<b>Required Courses</b>		
<i>Public History</i>		
Required Course:		3
HIST 343	Public History	
<i>Applied History One</i>		
Select one of the following:		3
HIST 411	Digital History	
HIST 445	Americans and the Environment	
HIST 450	History Internship	
<i>Applied History Two</i>		
Select two of the following:		6
HIST 323	African American History to 1876	
HIST 324	African American History Since 1876	
HIST 337	Native American History	



HIST 344	The American City
HIST 350	The American Civil War
HIST 371	History of Jews
HIST 437	The American West
HIST 445	Americans and the Environment

**Total Hours** 12

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Historical Competency

Students must demonstrate historical competency through successfully completing 6 credits prior to declaring the Letter of Completion in Applied History:

Code	Title	Hours
Select one of the following:		3
HIST 151	Ancient World to the Age of Global Encounters	
HIST 152	Early Modern to Contemporary World	
Select one of the following:		3
HIST 201	Colonial US to the Civil War Era	
HIST 202	US Civil War Era to Present	
or the equivalent as determined by the History Department		

## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

CERTIFICATE IN APPLIED HISTORY (5AHS)  
Revised 06.29.2022

## European History, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

European History, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/european-history-minor/>)

History Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/history/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.00 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Courses</b>		
Select two of the following:		6
HIST 151	Ancient World to the Age of Global Encounters	
HIST 152	Early Modern to Contemporary World	
Select four of the following:		12
HIST 305	Russia to 1855	
HIST 306	Russia Since 1855	
HIST 318	Gender and Sexuality in European Society	
HIST 319	History of Women to 1750	
HIST 331	England to 1689	
HIST 332	Britain Since 1689	
HIST 333	Medieval Church	
HIST 346	Rise of Imperial Britain	
HIST 347	Twentieth Century British Culture	
HIST 364	History of Medicine	
HIST 404	Violence in Post-45 Europe	
HIST 422	Ancient Greece	
HIST 423	Ancient Rome	
HIST 424	The Middle Ages	
HIST 426	French Revolution and Napoleon	
HIST 427	Nineteenth Century Europe	
HIST 454	Research and Writing Seminar	
HIST 464	The Scientific Revolution of the 17th and 18th Centuries	
<b>Total Hours</b>		<b>18</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

## MINOR IN EUROPEAN HISTORY (44C)

This program is effective as of Summer 2022

UCC 03.01.2022

Revised 05.31.2022

## General History, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

### Related Links

General History, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/history/>)History Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/history/>)Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

### Curriculum Guide

#### GPA Requirement

Minor GPA: 2.00 or higher

#### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Courses</b>		
Select three 100 & 200 level HIST courses		9
Select three 300 level or above HIST courses		9
<b>Total Hours</b>		<b>18</b>

- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

## MINOR IN GENERAL HISTORY (44A)

This program is effective as of Fall 2003

Revised 8-2019

## History, Bachelor of Arts (BA)

### Program Learning Outcomes

- **COMMUNICATION:** including speech and writing, using appropriate sources of information and various presentation formats. Links to University Outcome #1
  - able to develop & present a thesis effectively in either oral or written form
  - able to organize legitimate supporting materials in a comprehensible way
  - able to create a persuasive written argument
  - able to speak clearly on a topic
- **CRITICAL THINKING:** locate, analyze, synthesize and evaluate information and ideas from multiple perspectives. Links to University Outcomes #2 and #3.
  - able to interpret the meaning of historical texts
  - able to identify an author's thesis
  - able to identify key points in a document
  - able to assess the logical consistency of arguments
  - able to generate an independent argument from existing primary and secondary sources
- **PROFESSIONAL PROFICIENCY:** including competency in applying research methods and applying knowledge and skills to meet professional competencies with History. Links to University Outcomes #8 and #3.
  - able to locate and retrieve information from a variety of sources (print, electronic, other)
  - able to use Turabian (or Chicago Manual of Style)
  - able to assess the legitimacy and appropriateness of sources
- **OBJECTIVE KNOWLEDGE:** includes demonstrating historical knowledge at a level which reflects competency and understanding of course material pertaining to a variety of historical epochs and diverse geographical and cultural contexts. Links to University Outcomes #5 and #6, but is defined specifically by the ability to acquire and to assess historical facts as well as interpretations that are broadly-based as well as in-depth.
  - able to identify key historical figures, events, trends commensurate with being knowledgeable in a field of history
  - able to summarize the current prevailing analyses of historical events
  - able to identify mistakes of logic (or facts) when history is cited in debated issues
- **CAREER PREPARATION:** Links to University Outcome # 5.
  - can identify career paths suited to history majors
  - can extrapolate applied history experience to a variety of history-oriented careers
  - can report post-graduate success tied to history degree-based skills acquired as an undergraduate

### Related Links

History, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/history/>)History Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/history/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
Rock Studies 2 Requirements		42
Modern Language Requirement		0-9
Other Basic Requirements		0-3
Computer Competency		0-3
Major Requirements		42
Electives		36

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
Complete 0-9 credits		0-9
<b>Total Hours</b>		<b>0-9</b>

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

### Major Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Courses</b>		
HIST 151	Ancient World to the Age of Global Encounters	3
HIST 152	Early Modern to Contemporary World	3
HIST 201	Colonial US to the Civil War Era	3
HIST 202	US Civil War Era to Present	3
HIST 205	The Historian's Craft <sup>1</sup>	3

HIST 454	Research and Writing Seminar <sup>1</sup>	3
<b>Subtotal</b>		<b>18</b>
<b>Required Elective Courses</b>		
<i>United States</i>		
Select six credits from the list below (p. 884)		6
<i>Africa, Asia, Latin America and Middle East</i>		
Select six credits from the list below (p. 884)		6
<i>Europe</i>		
Select six credits from the list below (p. 884)		6
<b>Applied History</b>		
Select three credits from the list below (p. 884)		3
<b>Subtotal</b>		<b>21</b>
<b>Electives</b>		
All History majors must complete 3 additional upper division History credits.		
HIST 300/400 level course <sup>1</sup>		3
<b>Subtotal</b>		<b>3</b>
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### United States

Code	Title	Hours
HIST 304	American Military History <sup>1</sup>	3
HIST 313	U.S. Manhood and Masculinities <sup>1</sup>	3
HIST 323	African American History to 1876 <sup>1</sup>	3
HIST 324	African American History Since 1876 <sup>1</sup>	3
HIST 326	The Long Civil Rights Movement <sup>1</sup>	3
HIST 335	Outstanding Americans <sup>1</sup>	3
HIST 336	American Economic History <sup>1</sup>	3
HIST 337	Native American History <sup>1</sup>	3
HIST 344	The American City <sup>1</sup>	3
HIST 350	The American Civil War <sup>1</sup>	3
HIST 353	History of the Americas <sup>1</sup>	3
HIST 358	American Popular Culture, 1865 to the Present <sup>1</sup>	3
HIST 364	History of Medicine <sup>1</sup>	3
HIST 390	Experimental <sup>1</sup>	3
HIST 435	Pennsylvania <sup>1</sup>	3
HIST 437	The American West <sup>1</sup>	3
HIST 445	Americans and the Environment <sup>1</sup>	3
HIST 453	American Constitutional History and Law <sup>1</sup>	3
HIST 490	Independent Study <sup>1</sup>	3
HIST 498	Selected Topics <sup>1</sup>	3

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

### Africa, Asia, Latin America and Middle East

Code	Title	Hours
HIST 351	Latin America to 1830 <sup>1</sup>	3
HIST 352	Latin America Since 1830 <sup>1</sup>	3

HIST 353	History of the Americas <sup>1</sup>	3
HIST 362	Africa North of the Zambezi <sup>1</sup>	3
HIST 363	Southern Africa <sup>1</sup>	3
HIST 364	History of Medicine <sup>1</sup>	3
HIST 370	History and the Bible <sup>1</sup>	3
HIST 371	History of Jews <sup>1</sup>	3
HIST 376	Modern Japan <sup>1</sup>	3
HIST 380	Egyptology <sup>1</sup>	3
HIST 381	East Asian Military Traditions <sup>1</sup>	3
HIST 382	Modern Asian Pacific Rim <sup>1</sup>	3
HIST 386	Modern China <sup>1</sup>	3
HIST 390	Experimental <sup>1</sup>	3
HIST 406	Mass Killing and Genocide in the Modern World <sup>1</sup>	3
HIST 462	The Contemporary Middle East <sup>1</sup>	3
HIST 463	Israel-History, State and Society <sup>1</sup>	3
HIST 490	Independent Study <sup>1</sup>	3
HIST 498	Selected Topics <sup>1</sup>	3

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

### Europe

Code	Title	Hours
HIST 305	Russia to 1855 <sup>1</sup>	3
HIST 306	Russia Since 1855 <sup>1</sup>	3
HIST 318	Gender and Sexuality in European Society <sup>1</sup>	3
HIST 319	History of Women to 1750 <sup>1</sup>	3
HIST 331	England to 1689 <sup>1</sup>	3
HIST 332	Britain Since 1689 <sup>1</sup>	3
HIST 333	Medieval Church <sup>1</sup>	3
HIST 346	Rise of Imperial Britain <sup>1</sup>	3
HIST 347	Twentieth Century British Culture <sup>1</sup>	3
HIST 364	History of Medicine <sup>1</sup>	3
HIST 390	Experimental <sup>1</sup>	3
HIST 404	Violence in Post-45 Europe <sup>1</sup>	3
HIST 422	Ancient Greece <sup>1</sup>	3
HIST 423	Ancient Rome <sup>1</sup>	3
HIST 424	The Middle Ages <sup>1</sup>	3
HIST 426	French Revolution and Napoleon <sup>1</sup>	3
HIST 427	Nineteenth Century Europe <sup>1</sup>	3
HIST 464	The Scientific Revolution of the 17th and 18th Centuries <sup>1</sup>	3
HIST 490	Independent Study <sup>1</sup>	3
HIST 498	Selected Topics <sup>1</sup>	3

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

### Applied History

Code	Title	Hours
HIST 343	Public History <sup>1</sup>	3
HIST 395	Workshop <sup>1</sup>	3
HIST 411	Digital History <sup>1</sup>	3
HIST 450	History Internship <sup>1</sup>	3

HIST 490	Independent Study <sup>1</sup>	3
HIST 495	Workshop <sup>1</sup>	3

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. These opportunities can deepen and enhance the learning in History. In addition, there is a strong correlation between long-term student success and engagement in these opportunities:

1. Internships
2. Reacting to the Past designated courses
3. Student-faculty research
4. International and domestic study programs (short-term, semester, and year-long)
5. Volunteering at historical institutions (museums, archives, libraries, living history centers, etc.)
6. Career education and development
7. Student leadership development

## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

HISTORY - BA (5 44)

This program is effective as of Summer 2022

Revised 05.27.2022.

UCC 03.01.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
Select one of the following:		3
HIST 151	Ancient World to the Age of Global Encounters	
HIST 152	Early Modern to Contemporary World	
Select one of the following:		3
HIST 201	Colonial US to the Civil War Era	
HIST 202	US Civil War Era to Present	
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3

Select one of the following:		3
HIST 151	Ancient World to the Age of Global Encounters	
HIST 152	Early Modern to Contemporary World	
Select one of the following:		3
HIST 201	Colonial US to the Civil War Era	
HIST 202	US Civil War Era to Present	
MODL 1XX	Language and Culture I, II, or III	3
MATH 117	Quantitative Reasoning	3
<b>Hours</b>		<b>15</b>

### Second Year

#### Fall

HIST 205	The Historian's Craft	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
MODL 1XX	Language and Culture I, II, or III	3
Creative & Aesthetic Inquiry (p. 29)		3
Social Science Inquiry (p. 29)		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>

#### Spring

United States History 300/400		3
European History 300/400		3
MODL 1XX	Language and Culture I, II, or III	3
Thematic Thread Requirement (p. 29)		3
Elective/Minor/Certificate/2nd Major		3
<b>Hours</b>		<b>15</b>

### Third Year

#### Fall

United States History 300/400		3
African, Asian, Latin American, and Middle Eastern History 300/400		3
SCI 101	Science of Life	3
Thematic Thread Requirement (p. 29)		3
Elective/Minor/Certificate/2nd Major		3
<b>Hours</b>		<b>15</b>

#### Spring

Applied History 300/400		3
African, Asian, Latin American, and Middle Eastern History 300/400		3
SCI 102	Understanding the Physical World	3
Elective/Minor/Certificate/2nd Major		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>

### Fourth Year

#### Fall

European History 300/400		3
Elective/Minor/Certificate/2nd Major		3
Elective/Minor/Certificate/2nd Major		3
Elective/Minor/Certificate/2nd Major		3



Thematic Thread Requirement (p. 29)	3
<b>Hours</b>	<b>15</b>
<b>Spring</b>	
History Elective 300/400	3
History Elective 300/400	3
Elective/Minor/Certificate/2nd Major	3
Elective/Minor/Certificate/2nd Major	3
Elective/Minor/Certificate/2nd Major	3
<b>Hours</b>	<b>15</b>
<b>Total Hours**</b>	<b>121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 5 44  
Revised: 04.21.2022

## Non-Western History, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

### Related Links

Non-Western History, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/non-western-history-minor/>)

History Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/history/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

Curriculum Guide

### GPA Requirement

Minor GPA: 2.00 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required History Courses</b>		
HIST 151	Ancient World to the Age of Global Encounters	3
HIST 152	Early Modern to Contemporary World	3
Select three of the following:		9

HIST 362	Africa North of the Zambezi
HIST 363	Southern Africa
HIST 364	History of Medicine
HIST 370	History and the Bible
HIST 371	History of Jews
HIST 376	Modern Japan
HIST 380	Egyptology
HIST 381	East Asian Military Traditions
HIST 382	Modern Asian Pacific Rim
HIST 386	Modern China
HIST 406	Mass Killing and Genocide in the Modern World
HIST 454	Research and Writing Seminar (Nonwestern topics only)
HIST 462	The Contemporary Middle East
HIST 463	Israel-History, State and Society

### Free Elective

Select one History course <sup>1</sup>	3
<b>Total Hours</b>	<b>18</b>

<sup>1</sup> From HIST 151 through HIST 498.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN NON-WESTERN HISTORY (44D) This program is effective as of Summer 2022 UCC 03..01.2022 Revised 05.31.2022

## United States History, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

### RELATED LINKS

United States History, Minor Program Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/history/undergraduate-programs/>)

History Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/history/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

# CURRICULUM GUIDE

## GPA REQUIREMENT

Minor GPA: 2.00 or higher

## MINOR REQUIREMENTS

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Courses</b>		
HIST 201	Colonial US to the Civil War Era	3
HIST 202	US Civil War Era to Present	3
Select four of the following:		12
HIST 304	American Military History	
HIST 313	U.S. Manhood and Masculinities	
HIST 323	African American History to 1876	
HIST 324	African American History Since 1876	
HIST 326	The Long Civil Rights Movement	
HIST 335	Outstanding Americans	
HIST 336	American Economic History	
HIST 337	Native American History	
HIST 343	Public History	
HIST 344	The American City	
HIST 350	The American Civil War	
HIST 351	Latin America to 1830	
HIST 352	Latin America Since 1830	
HIST 353	History of the Americas	
HIST 358	American Popular Culture, 1865 to the Present	
HIST 364	History of Medicine	
HIST 395	Workshop	
HIST 411	Digital History	
HIST 435	Pennsylvania	
HIST 437	The American West	
HIST 445	Americans and the Environment	
HIST 453	American Constitutional History and Law	
HIST 454	Research and Writing Seminar (American topics only)	
HIST 495	Workshop	
<b>Total Hours</b>		<b>18</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to

ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN UNITED STATES HISTORY (44F)

This program is effective as of Summer 2021

UCC 03.01.2022

Revised 06.07.2022

## Homeland/Corporate Security and Leadership

Chair	Secretary	Location	Department Phone
Dr. Susan Lubinski	Karen Grady	215 Spotts World Culture Building	724-738-2005

Department Web Site URL (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/homeland-corporate-security-studies/>)

Cognitive Science Fact Sheet (<https://www.sru.edu/documents/programs/factsheets/undergraduate/CognitiveScience-fs.pdf>)

Homeland/Corporate Security Studies Fact Sheet (<https://www.sru.edu/documents/programs/factsheets/undergraduate/securitystudies-fs.pdf>)

Leadership Fact Sheet (<https://www.sru.edu/documents/programs/factsheets/undergraduate/LeadershipStudies-fs.pdf>)

## Faculty

### Melissa Berdell

Instructor

Homeland/Corp Sec & Leadership

D.H.E., Duquesne University

M.S., Point Park University

B.A., University of Pittsburgh

### Kevin Cassidy

Instructor

Homeland/Corp Sec & Leadership

M.A., John Jay College

B.S., John Jay College

### Kevin Fonner

Instructor

Homeland/Corp Sec & Leadership

### Susan Lubinski

Associate Professor

Homeland/Corp Sec & Leadership

J.D., Duquesne University

M.S., Grove City College

B.S.B.A., Youngstown State University

C.P.A., Youngstown State University

### Scott Mensch

Professor

Homeland/Corp Sec & Leadership

Ph.D., Capella University

M.B.A., Point Park University

B.A., Indiana University of PA

#### **Bret Perchaluk**

Instructor  
Homeland/Corp Sec & Leadership  
M.S., National Intelligence University  
B.A., Rider University

#### **Bret Rogowitz**

Instructor  
Homeland/Corp Sec & Leadership  
M.S., Eastern Illinois University  
B.S., Franklin University

#### **John Rovesti**

Instructor  
Homeland/Corp Sec & Leadership  
M.S., Carnegie Mellon University  
B.S., Lehigh University

#### **Timothy Sevison**

Instructor  
Homeland/Corp Sec & Leadership

#### **Paul Webster**

Instructor  
Homeland/Corp Sec & Leadership  
M.S., Colorado Technical University  
B.S., Robert Morris College

#### **Brian Wisneski**

Instructor  
Homeland/Corp Sec & Leadership  
Ed.D., Creighton University  
M.S., Boston University  
B.A., Spring Arbor University

## Programs

### Majors

- Corporate Security, Bachelor of Science (BS) - Concentration in Fraud (p. 898)
- Corporate Security, Bachelor of Science (BS) - Concentration in Organizational Security (p. 901)
- Homeland Security, Bachelor of Science (BS) (p. 906)

### Minors

- Cognitive Science, Minor (p. 897)
- Emergency Management, Minor (p. 904)
- Fraud, Minor (p. 905)
- Homeland Security, Minor (p. 909)
- Leadership, Minor (p. 910)
- Organizational Security, Minor (p. 912)

### Certificates

- Emergency Management, Certificate (p. 903)
- Fraud, Certificate (p. 904)
- Homeland Security, Certificate (p. 909)
- Organizational Security, Certificate (p. 911)

## Courses

### CSS Courses

#### **CSS 100 - Modern Security**

This course will explore the ever-changing security environment confronting domestic governments in securing its homeland, for-profit and non-profit organizations, and individuals. This course will discuss the history of security, the sub-topics of security, and whether insecurities can be eliminated, prevented, or merely managed. Students will apply risk assessment procedures, devise solutions to complex security issues, and weigh the strengths and weaknesses of those solutions. The student will be able to assess the complexity of solving modern day security problems when confronting economic limitations, policy and legal implications, and the feasibility of providing security to diverse populations.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

#### **CSS 120 - Introduction to Private Security**

This course will provide an overview of the private security field and the numerous complexities within it. Topics include but are not limited to an overview of private security, the basic goals and responsibilities of the industry, the challenges facing security, and various security systems for infrastructure, institutional and commercial organizations.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

#### **CSS 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

#### **CSS 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CSS 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. The course outline will be determined by the instructor based on key developments, trends or specialized content within homeland security. Permission of instructor.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**CSS 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CSS 210 - Physical Security**

This course discusses the methods, processes, and policies surrounding the security protection of the workplace. Students will study the historical roots of physical protection of assets, cultural contexts and interpretations of security efforts, as well as the way modern technology is changing the methods and focus of protection programs. The important elements of physical barriers, electronic controls and surveillance, and procedural efforts to secure assets will be examined. The role of the Security Manager in regulated workspaces will be discussed.

Prerequisite: CSS 120<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**CSS 240 - Security Management**

This course will examine the security department's role and function within an organization and the activities associated with operating and managing the department. This course will also look at how to manage various relationships security professionals encounter both internally and externally.

Prerequisite: CSS 120<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**CSS 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CSS 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. The course outline will be determined by the instructor based on key developments, trends or specialized content within homeland security. Permission of instructor.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**CSS 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CSS 300 - Personnel Security**

This course discusses the structures, processes, and regulations surrounding the security protection of people in the workplace. Students will study and weigh the advantages and legal restrictions of background checks as a condition of employment. Protection of workers in general, as well as programs to safeguard executives, workers in controversial industries/fields, and the design of policies and programs providing protection for workers with special issues outside the workplace will be examined. Defining, preventing and reacting to workplace violence will be explored.

Prerequisites: CSS 120<sup>D</sup> or HSS 120<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CSS 320 - Security Risk and Emergency Management**

This course will provide guidance how to conduct risk assessments, handle emergencies and develop and implement business contingency and disaster recovery plans. Students will learn how to develop and use risk surveys and other information gathering techniques, and design and implement controls by understanding cost/benefit analysis, crime prediction, response planning and business impact analysis.

Prerequisite: CSS 240<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CSS 351 - Fraud**

Approximately 5% of U.S. organizations annual revenues are lost to fraud each year. This course explores the historical and social problems created by fraud, the ethical and legal issues fraud presents to organizations and our economy; and the principles of fraud detection, examination, and prevention organizations employ to combat fraud in order to minimize both economic losses and a loss of jobs.

Credits: 3

Term(s) Typically Offered: Offered Fall, Winter, & Summer

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CSS 352 - Law & Ethics in the Workplace**

This course explores the historical, legal, ethical and practical implications of legal rights of workers in organizational relationships. This course will provide the historical evolution of protective legislation for workers and the continual refinement of common law to workers' rights. Ethical issues not addressed by the law will be explored as well as the importance of diversity in order to provide maximum growth for society and all individuals.

Credits: 3

Term(s) Typically Offered: Offered Winter, Spring&Summer  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CSS 354 - Risk Assessment and Fraud Prevention**

Every level of today's organizations must make ethics and organizational integrity a priority. Controlling for risk and preventing fraud are critical skills leaders in every organization will be called upon to exercise. Focus must be placed on fraud prevention, internal controls, compliance with regulations and other risk exposure. Students will apply course concepts to their own disciplines.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CSS 360 - Specialized Fraud Schemes**

This course will examine specialized frauds such as identity theft, financial institution fraud, payment fraud, insurance fraud, healthcare fraud, contract and procurement fraud, tax fraud, and bankruptcy fraud. A thorough analysis of money laundering and its place in specialized fraud schemes will be reviewed. For each type of specialized fraud, we will explore the various types of fraud schemes within these specialized frauds and the controls that can be implemented to prevent or detect them.

Prerequisites: CSS 351<sup>D</sup> and ACCT 209<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.  
Enrollment is limited to students with a program in CERT - Fraud, Fraud or Organizational Security.

**CSS 370 - Fraud Law and Report Writing**

This course will examine both domestic and international laws surrounding fraud. We will discuss the special non-governmental agencies assisting in the fight against fraud domestically and worldwide and their recommended compliance guidelines. In this class we will also discuss how to write an effective fraud report for various audiences. Ethical responsibilities of a fraud examiner will also be examined.

Prerequisite: CSS 351<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.  
Enrollment is limited to students with a program in Fraud.

**CSS 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CSS 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. The course outline will be determined by the instructor based on key developments, trends or specialized content within homeland security. Permission of instructor.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CSS 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CSS 420 - Fraud Examination**

This course will expose the student to an in-depth analysis of the fraud schemes perpetrated by those within and external to organizations. The elements of fraud schemes, the red flags associated with each scheme and how the scheme can be prevented and detected will be analyzed. This course will also emphasize financial statement fraud, and external fraud schemes from customers, vendors and unrelated third parties. Corporate espionage will also be covered.

Prerequisite: CSS 351<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.  
Enrollment is limited to students with a program in Corporate Security.

**CSS 430 - Corporate Security Law**

This course will cover the pertinent security laws surrounding an investigation and developing a case for prosecution. It will also cover the various laws security professionals can breach while conducting security investigations.

Prerequisite: CSS 351<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.  
Enrollment is limited to students with a program in Corporate Security, Fraud or Organizational Security.



**CSS 440 - Corporate Security Investigation**

This course will provide the fundamentals of corporate security investigations, the methods used in an investigation, how to build a case, apply investigative strategies, use investigative technology and write an effective report. The course will also emphasize the ethics, values and laws one must consider when conducting an effective investigation.

Prerequisite: CSS 351<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Corporate Security, Fraud or Organizational Security.

**CSS 450 - Internship**

Supervised placement and research in selected public and private agencies.

Credits: 3-9

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CSS 460 - Corporate Security Capstone**

Student will apply and demonstrate prior knowledge, skills and abilities to a major project which will be communicated both in written and oral forms. This course will cover current topics in corporate security and current global issues challenging security. A discussion of professional ethics, proper etiquette and interviewing skills, negotiation and conflict resolution skills will also be discussed.

Prerequisites: CSS 440<sup>C</sup> and CSS 430<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Corporate Security.

**CSS 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CSS 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. The course outline will be determined by the instructor based on key developments, trends or specialized content within homeland security. Permission of instructor.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CSS 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## HSS Courses

**HSS 120 - Introduction to Homeland Security**

This course is a general introduction to the foundations of homeland security, counter-terrorism, infrastructure protection, intelligence operations and other mechanics of the homeland defense field. This course also includes an overview of the legal, sociopolitical and criminal justice aspects of homeland security.

Credits: 3

Term(s) Typically Offered: Offered Fall & Summer Terms

**HSS 130 - Principles of Emergency Management**

This course will introduce the foundations of emergency management and discuss the emergency management cycle. The concept of the whole community approach will be emphasized along with the tools and resources used in emergency management situations. An emergency exercise will be assigned and special topics unique to emergencies will be explored.

Credits: 3

**HSS 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**HSS 170 - Lenses of Catastrophe**

Lenses of Catastrophe asks students to examine the interdisciplinary approach of disasters. Disasters, whether stemming from natural or manmade hazards, can impact the entire spectrum of disciplines and industries. This course looks at disasters from the perspective of different fields and how they have been impacted by past events.

Credits: 3

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**HSS 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HSS 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. The course outline will be determined by the instructor based on key developments, trends or specialized content within homeland security. Permission of instructor.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**HSS 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HSS 210 - Fundamentals of Terrorism**

This course will explore the complex issues surrounding terrorism. In terms of terrorism, the topics addressed may include: complexities of defining it, types of terrorists, causes of terrorism, methods used to achieve their goals, environments, funding and support, structure and counter-terrorist measures, and the issues the criminal justice system faces when trying to prevent, detect, and investigate it.

Prerequisites: HSS 120<sup>C</sup> or CSS 120<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with department of Homeland/Corp Sec & Leadership.

**HSS 230 - Risk Analysis and Strategic Planning**

This course provides an overview of principles of risk analysis and management, including vulnerability and threat identification, assessing risk threats, security survey methodology, emergency management and response strategies.

Prerequisite: HSS 120<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**HSS 250 - Managing Natural, Man-Made and Technological Disasters**

This course will discuss the history of natural, technological and manmade (intentional) disasters. (e.g., 1918 Pandemic, Great Flood of 1923, 1994 Northridge Earthquake, Coronavirus 19, September 11th). Students will analyze the complex nature of disasters, identifying overriding themes while examining lessons learned and best practices to handle specific types of disasters.

Credits: 3

**HSS 260 - Emergency Management Planning**

This course will provide an in-depth analysis of planning methodologies and constructs as well as pitfalls and limiting factors in the development and execution of emergency management plans at the strategic, operational and tactical levels. The origins of emergency management planning, applicable policies and legislation will be reviewed. The course will also examine historical incident review and analysis, contemporary and emerging planning doctrine, and advanced planning concepts.

Prerequisite: HSS 130<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Enrollment limited to students with department of Homeland/Corp Sec & Leadership.

**HSS 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HSS 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. The course outline will be determined by the instructor based on key developments, trends or specialized content within homeland security. Permission of instructor.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**HSS 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HSS 300 - Terrorist Organizations and Lone Wolves**

This course will allow students to study the ideological evolution, the behavioral indicators, recruitment styles, organizational styles, financing methods, and tactics for specific domestic and international terrorist organizations. Issues such as the radicalization and behavioral indicators of both terrorist organization and lone wolves will be discussed as well.

Prerequisite: HSS 210<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Homeland/Corp Sec & Leadership.

**HSS 310 - Weapons of Mass Destruction**

This course will examine the threat and use of nuclear, biological, chemical, and radiological weapons and their implications to the Homeland. The course will evaluate means of proliferation and countermeasures overseas and within the Homeland.

Prerequisite: HSS 210<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Homeland/Corp Sec & Leadership.

**HSS 320 - Protecting Infrastructure and Key Assets**

This course focuses on the protection of critical infrastructure, including information and telecommunication systems, water supply, energy, first responders, transportation, health/medical and other key assets.

Prerequisite: HSS 230<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HSS 330 - Intelligence Operations**

This course encompasses the development and use of national security and policing intelligence, and includes theoretical and practical models of intelligence in governmental and private security environments.

Prerequisite: HSS 320<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HSS 340 - Intelligence for Homeland Security**

This course will examine intelligence operations for the Homeland Security Enterprise at the state and local level, within the Department of Homeland Security, and within the private sector. The course will utilize intelligence tradecraft to assess current threats, trends, hazards, and vulnerabilities in the Homeland. The course will also prepare students to write intelligence briefs.

Prerequisite: HSS 330<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Homeland Security.

**HSS 350 - Securing Virtual Infrastructure**

This course will examine the implications of the growing cybersecurity environment. The course will discuss targeted systems, threat adversaries, attack methods, and recovery and mitigation processes.

Prerequisite: HSS 230<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Homeland Security.

**HSS 360 - Social Dimensions of Disaster**

This class will analyze how individuals, groups, families, organizations, communities and countries, handle disasters before, during, and after they occur. The vulnerability of various social groups will be explored as well as reactions to disasters the stressors associated with disasters. Methods to reduce vulnerabilities and build local capacity will be covered.

Prerequisites: HSS 250<sup>C</sup> or HSS 260<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in CERT - Emergency Management, Emergency Management, Corporate Security, Homeland Security, Fraud or Organizational Security.

**HSS 370 - Research in Disasters and Emergency Management**

This course will describe in detail how research is conducted in disasters and emergency management how to read and understand scholarly work; and apply related studies from the field of disaster research. Students will be taught how to evaluate open-source data for construction of research projects. The basic foundations of how to conduct qualitative research studies geared towards disaster research will be provided.

Prerequisite: HSS 250<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in CERT - Emergency Management, Emergency Management, Corporate Security, Homeland Security, Fraud or Organizational Security.

**HSS 380 - Crisis & Emergency Risk Communication**

Disasters mandate effective communication. This course will analyze communication theory to examine common challenges and best practices encountered in emergency, crisis and risk communication situations by public information officers, public authorities, first responders, and health professionals. It will explore the opportunity to develop strategies and communication solutions in interpersonal, mediated, social media, and public contexts.

Prerequisite: HSS 250<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in CERT - Emergency Management, Emergency Management, Corporate Security, Homeland Security, Fraud or Organizational Security.

**HSS 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HSS 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. The course outline will be determined by the instructor based on key developments, trends or specialized content within homeland security. Permission of instructor.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HSS 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HSS 441 - Terrorism, Law and National Security**

This course will discuss terrorism-its structure, causes, and illegal financing and the evolution of domestic and international laws evolving to deal with terrorism and national security.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HSS 450 - Internship HS**

Supervised placement and research in selected public and private agencies. Permission of instructor.

Credits: 3-9

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HSS 460 - Capstone in Homeland Security**

The Capstone class applies student professional proficiency, communication skills, ethical understanding, cultural awareness and critical thinking towards the completion of a capstone project that demonstrates competency in multiple aspects of homeland security and defense.

Prerequisite: HSS 340<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Homeland Security.

**HSS 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HSS 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. The course outline will be determined by the instructor based on key developments, trends or specialized content within homeland security. Permission of instructor.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HSS 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## LEAD Courses

**LEAD 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1 or Freshman 2 may **not** enroll.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**LEAD 144 - Introduction to Cognitive Studies**

The goal of Cognitive Studies is to understand the mind using insights from a variety of fields including Psychology, Computer Science, Linguistics, Philosophy, Anthropology, Sociology, and Neuroscience. Cognitive Science is by definition an interdisciplinary field. The class will cover mental processes such as perception, reasoning, memory, attention, imagery, language, intelligence, thinking, decision-making, and consciousness using an interdisciplinary approach that fits within a liberal arts perspective.

Credits: 3

Term(s) Typically Offered: Offered Summer & Winter Terms

Thematic Thread(s): Transfer Thread Completion Course

**LEAD 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**LEAD 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**LEAD 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**LEAD 215 - Introduction to Consciousness**

This class will survey theories of consciousness and self through the scope of a broad range of fields: Neurophysiology, Cognitive Psychology, Philosophy, Artificial Intelligence, Evolutionary Psychology and Physics. Consciousness and the sense of self will be explored and viewed from a number of different disciplines using an interdisciplinary approach.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Conservation, Technology & Imagination, Human Diversity & Well-Being, Transfer Thread Completion Course

**LEAD 244 - Artificial Intelligence in Cognitive Studies and Film**

Artificial intelligence (AI) is the study of how to realize human intelligence on a computer. Philosophically, it is concerned with replicating consciousness and self-recognition in machines. The goal of AI is to make a computer that can learn, plan, and solve problems. This course will cover fundamental knowledge for understanding AI. We will introduce the history of AI in Cognitive Science and how it has been explored in various popular films.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course

**LEAD 251 - Leadership Theory**

A survey of the nature, purpose and leadership of human institutions: why and how people organize; organizational environments, forms, structures, processes, leadership, communication, ethical, and societal impacts.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Transfer Thread Completion Course

**LEAD 253 - Online Practical Research**

Students will participate in a leadership workshop online where they will examine 10 leaders via case studies and keep a portfolio with a summation of their findings regarding the various leaders and their actions with respect to the organizational development theory studies in the Introduction to Leadership Course. The course instructor will supervise the students and certify that they met the requirements in the following areas: leadership development, group service, and field-work experience.

Prerequisites: INDP 251<sup>C</sup> or CSLD 251<sup>C</sup> or LEAD 251<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2.

**LEAD 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**LEAD 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**LEAD 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**LEAD 315 - Mindfulness and Brain**

Cognitive Science is the interdisciplinary study of the mind, perception, and sense of self. Many practices in Mindfulness can impact both the mind and body. The several books and research projects on the topic reflect this connection. This class will explore how meditation, mindfulness, Tai Chi and Yoga can affect the brain using an interdisciplinary approach within a liberal arts perspective.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**LEAD 344 - Left and Right Brain: From Neuron to Culture**

This class will explore the differences between the left and right sides of the brain. The class begins with differences in anatomy and physiology and will conclude with how these differences affect personality, culture, art, music, science, and politics. The emphasis will be an interdisciplinary approach within a Liberal Arts framework.

Credits: 3

Thematic Thread(s): Conservation, Technology & Imagination, Human Diversity & Well-Being, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**LEAD 350 - Multicultural Leadership**

Multicultural Leadership compares leadership across cultures and countries, explores the relationship between culture and leadership styles, ideas of cultural diversity and globalization, and a variety of considerations with implications for leading within and across national borders and global regions. This course also explores the challenging but increasingly important task of working across cultures in teams composed of persons from different cultures, ethnicities, racial identifications, and religious and social backgrounds.

Credits: 3

Term(s) Typically Offered: Offered Every Term  
Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**LEAD 351 - Leadership Practicum**

Students will participate in leadership and campus student organization and/or sanctioned activities and will keep a journal relating their activities to leadership and organizational development theory studied in the Introduction to Leadership course. The course instructor will supervise the students and certify that they met the requirements in the following areas: leadership development, group service and field-work experience.

Prerequisites: INDP 251<sup>D</sup> or PROF 250<sup>D</sup> or CSLD 251<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**LEAD 352 - Self Leadership**

Before an individual can lead other people or organizations, they must first be able to lead themselves effectively. Self Leadership is a course designed to introduce students to processes, tools and strategies to overcome obstacles and to achieve goals.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms  
Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**LEAD 353 - Teambuilding for Leaders**

Teambuilding for Leaders exposes students to the techniques, processes and tools to effectively build, lead and motivate multifaceted group of individuals and galvanize them into a functional and effective team oriented on achieving mutually supporting goals.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**LEAD 354 - Strategic Planning and Decision Making for Leaders**

Strategic Planning and Decision Making for Leaders introduces students to a process of planning that helps leaders apply thoroughness, clarity, sound judgment, logic, and professional knowledge to understand situations, develop options to solve problems, and reach decisions. This process helps leaders, their staffs, and others think critically and creatively while planning.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**LEAD 355 - Leadership Development Course**

Strategic Planning and Decision Making for Leaders introduces students to a process of planning that helps leaders apply thoroughness, clarity, sound judgment, logic, and professional knowledge to understand situations, develop options to solve problems, and reach decisions. This process helps leaders, their staffs, and others think critically and creatively while planning.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**LEAD 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered Every Term  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**LEAD 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**LEAD 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**LEAD 450 - Internship**

Supervised placement in selected professional agencies.

Credits: 1-12

Term(s) Typically Offered: Offered Every Term

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**LEAD 456 - Research in Cognitive Science**

The goal of Cognitive Science is to understand the mind using insights from a variety of fields including Psychology, Computer Science, Linguistics, Philosophy, Anthropology, Sociology, and Neuroscience. Cognitive Studies is by definition an interdisciplinary field. Interdisciplinary research comprises a major component to the field. In this course, students will gain experience by conducting a research project.

Prerequisites: (INDP 144<sup>C</sup> or CSLD 144<sup>C</sup> or LEAD 144<sup>C</sup>) and INDP 318<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**LEAD 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**LEAD 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**LEAD 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Cognitive Science, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

**Related Links**

Cognitive Science, Minor Department Page (<https://www.sru.edu/academics/majors-and-minors/cognitive-science-interdisciplinary-programs/>)

Cognitive Science, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/cognitive-science-interdisciplinary-programs/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

Code	Title	Hours
<b>Core Courses</b>		
<i>Oral and Written Communication</i>		
Select one of the following:		3
LEAD 144	Introduction to Cognitive Studies	
LEAD 215	Introduction to Consciousness	
<i>Interpersonal Skills and Civic Responsibility</i>		
Select one of the following:		3
LEAD 244	Artificial Intelligence in Cognitive Studies and Film	
LEAD 315	Mindfulness and Brain	
LEAD 344	Left and Right Brain: From Neuron to Culture	
<i>Analytical, Quantitative &amp; Critical Thinking Skills</i>		
Select one of the following:		3
INDP 317	Statistics for the Social Sciences	
INDP 318	Research Methods in Interdisciplinary Studies	
LEAD 456	Research in Cognitive Science	
<b>Emphasis Area</b>		
Students must take at least one course from each area		
<i>Mind and Brain</i>		
Select one of the following:		3
BIOL 102		
INDP 202	Introduction to Anthropology	
INDP 211	Biological Anthropology	
LEAD 315	Mindfulness and Brain	
LEAD 344	Left and Right Brain: From Neuron to Culture	
PHIL 351	Philosophy of Natural Science	
<i>Intelligence, Perception and Technology</i>		
Select one of the following:		3
CPSC 130	Introduction to Computing and Programming	
CPSC 146	Programming Principles	
CPSC 300	Challenges of Computer Technology	
ENGL 230	Introduction to Linguistics and Grammar	
LEAD 244	Artificial Intelligence in Cognitive Studies and Film	
PHIL 113	Formal Logic	
<i>Consciousness, Self and Others</i>		
Select one of the following:		3
COMM 217	Intercultural Communication	
COMM 314	Interpersonal Communication	
LEAD 215	Introduction to Consciousness	

LEAD 350	Multicultural Leadership
INDP 326	Society, Culture and Self
INDP 327	Religion and Society
LEAD 352	Self Leadership
PHIL 123	Ethics
PHIL 343	Asian Philosophy

**Total Hours** **18**

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN COGNITIVE SCIENCE (80J)

This program is effective as of Summer 2018

Revised 04.09.2020

# Corporate Security, Bachelor of Science (BS) - Concentration in Fraud

## Program Learning Outcomes

- **Critical Thinking and Problem Solving in Security Studies:** Students will develop critical thinking skills necessary to the identification and response of security threats.
- **Ethics, Values and Morality in Security Studies:** Students will identify, explain and apply principles of ethics, law, values and morality to security-based scenarios and practices.
- **Professional Communication in Security Studies:** Students will demonstrate ability to clearly articulate plans, strategies, analyses and other field-based communications in oral and written format, including the use of current technologies and media.
- **Professional Proficiency in Security Studies:** Students will recognize, explain, report and demonstrate current field-based best practices in security management, threat response, and other knowledge/skills/abilities demanded by the field and the impact of technology on security preparedness and implementation.
- **Writing Proficiency in Security Studies:** Students will practice and apply principles of clear, professional, succinct and straightforward writing.

## Related Links

Corporate Security - Fraud, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/corporate-security/>)

Homeland/Corporate Security Studies Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/homeland-corporate-security-studies/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.00 or higher

Overall GPA: 2.00 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	60
	Electives	18

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15

### Thematic Thread

Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

- <sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Core Courses</b>		
ACCT 209	Financial Accounting <sup>1</sup>	3
ACCT 340	Legal Environment of Business <sup>1</sup>	3
CSS 120	Introduction to Private Security <sup>2</sup>	3
CSS 351	Fraud <sup>2</sup>	3
CSS 352	Law & Ethics in the Workplace <sup>2</sup>	3
CSS 354	Risk Assessment and Fraud Prevention <sup>2</sup>	3
CSS 430	Corporate Security Law <sup>2</sup>	3
CSS 440	Corporate Security Investigation <sup>2</sup>	3
CSS 460	Corporate Security Capstone <sup>2</sup>	3
ENGL 205	Introduction to Professional Writing <sup>1</sup>	3
LEAD 251	Leadership Theory <sup>1</sup>	3
MIS 265	Management Information Systems <sup>1</sup>	3
MIS 301	Practical Computer Security <sup>1</sup>	3

Subtotal 39

### Fraud Concentration

CSS 240	Security Management <sup>2</sup>	3
CSS 360	Specialized Fraud Schemes <sup>2</sup>	3
CSS 370	Fraud Law and Report Writing <sup>2</sup>	3
CSS 420	Fraud Examination <sup>2</sup>	3
MIS 333	Introduction to Computer Forensics <sup>2</sup>	3
<b>Subtotal</b>		<b>15</b>

### Major Electives

Select two of the following: 6

ACCT 322	Business Analysis and Decision Making <sup>1</sup>	
CSS 190	Experimental <sup>2</sup>	
or CSS 290	Experimental	
or CSS 390	Experimental	
CSS 195	Workshop <sup>2</sup>	
or CSS 295	Workshop	
or CSS 395	Workshop	
or CSS 495	Workshop	
CSS 198	Selected Topics <sup>2</sup>	
or CSS 298	Selected Topics	
or CSS 398	Selected Topics	
or CSS 498	Selected Topics	
CSS 210	Physical Security <sup>2</sup>	
CSS 300	Personnel Security <sup>2</sup>	
CSS 320	Security Risk and Emergency Management <sup>2</sup>	
CSS 450	Internship <sup>2</sup>	
CSS 490	Independent Study <sup>2</sup>	
HSS 120	Introduction to Homeland Security <sup>2</sup>	
HSS 210	Fundamentals of Terrorism <sup>2</sup>	
INDP 348	Sociology of Organizations <sup>1</sup>	
LEAD 352	Self Leadership <sup>1</sup>	
LEAD 353	Teambuilding for Leaders <sup>1</sup>	
MGMT 351	Organizational Behavior <sup>1</sup>	

Subtotal 6

**Total Hours 60**

<sup>1</sup> Course counts for 50% of Major but not Major GPA

<sup>2</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Internships
2. Job Shadowing
3. Security Studies Club
4. Project to End Human Trafficking Club
5. Security Studies Speaker's Series

## 6. Department of Homeland/Corporate Security Studies Field Trips and Spring Break Trips

## CORPORATE SECURITY (5170)

## Concentration in Fraud (FRAD)

This program is effective as of Fall 2019

Revised 7-2019

UCC 3.26.2019

**Important Curriculum Guide Notes**

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

**Recommended Four-Year Plan**

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CSS 120	Introduction to Private Security	3
ENGL 102	Critical Writing	3
ESAP 101	FIRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>3</sup>	3
	Creative & Aesthetic Inquiry (p. 29)	3
	Humanities Inquiry (p. 29)	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
LEAD 251	Leadership Theory	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
	Select one of the following:	3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
	Free Elective	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
ACCT 209	Financial Accounting	3
ENGL 205	Introduction to Professional Writing <sup>1</sup>	3
CSS 240	Security Management	3
SCI 101	Science of Life	3
	Free Elective	3
	Declare a Thematic Thread <sup>2</sup>	
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
CSS 352	Law & Ethics in the Workplace	3
SCI 102	Understanding the Physical World	3
ACCT 340	Legal Environment of Business	3

MIS 265	Management Information Systems	3
<b>Free Elective</b>		<b>3</b>
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
CSS 351	Fraud	3
CSS 360	Specialized Fraud Schemes	3
CSS 420	Fraud Examination	3
MIS 301	Practical Computer Security	3
	Social Science Inquiry (p. 29)	3
	Thematic Thread Requirement (p. 29)	3
	Free Elective	3
<b>Hours</b>		<b>21</b>
<b>Spring</b>		
CSS 354	Risk Assessment and Fraud Prevention	3
CSS 370	Fraud Law and Report Writing	3
CSS 430	Corporate Security Law	3
MIS 333	Introduction to Computer Forensics	3
	Major Elective	3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
CSS 440	Corporate Security Investigation	3
	Thematic Thread Requirement (p. 29)	3
	Major Elective	3
<b>Hours</b>		<b>9</b>
<b>Spring</b>		
CSS 460	Corporate Security Capstone	3
	Thematic Thread Requirement (p. 29)	3
	Thematic Thread Requirement (Upper Level) (p. 29)	3
	Free Elective	5-6
<b>Hours</b>		<b>14-15</b>
<b>Total Hours**</b>		<b>120-121</b>

<sup>1</sup> The prerequisites for ENGL 205 are ENGL 102 & ENGL 104.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>3</sup> Course offered in multiple subjects; cannot take course in first major subject.

\* Students are encouraged to take ESAP 101 as a Free Elective.

• CS Organizational Security Major requires 60 Credit Hours (36 Core + 9 General + 9 Culture + 6 Electives).

• The number of free electives will depend on Rock Studies 2 courses taken and/or Minor.

• The number of Rock Studies 2 courses will depend on how much overlap there is between major courses and Rock Studies 2 courses.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.



Major Code: 5170

Concentration Code: FRAD

Revised date: 01.28.2021

# Corporate Security, Bachelor of Science (BS) - Concentration in Organizational Security

## Program Learning Outcomes

- **Critical Thinking and Problem Solving in Security Studies:** Students will develop critical thinking skills necessary to the identification and response of security threats.
- **Ethics, Values and Morality in Security Studies:** Students will identify, explain and apply principles of ethics, law, values and morality to security-based scenarios and practices.
- **Professional Communication in Security Studies:** Students will demonstrate ability to clearly articulate plans, strategies, analyses and other field-based communications in oral and written format, including the use of current technologies and media.
- **Professional Proficiency in Security Studies:** Students will recognize, explain, report and demonstrate current field-based best practices in security management, threat response, and other knowledge/skills/abilities demanded by the field and the impact of technology on security preparedness and implementation.
- **Writing Proficiency in Security Studies:** Students will practice and apply principles of clear, professional, succinct and straightforward writing.

## Related Links

Corporate Security - Organizational Security, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/corporate-security/>)

Homeland/Corporate Security Studies Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/homeland-corporate-security-studies/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	60
	Electives	18

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	

CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Core Courses</b>		
ACCT 209	Financial Accounting <sup>1</sup>	3
ACCT 340	Legal Environment of Business <sup>1</sup>	3
CSS 120	Introduction to Private Security <sup>2</sup>	3
CSS 351	Fraud <sup>2</sup>	3
CSS 352	Law & Ethics in the Workplace <sup>2</sup>	3
CSS 354	Risk Assessment and Fraud Prevention <sup>2</sup>	3
CSS 430	Corporate Security Law <sup>2</sup>	3
CSS 440	Corporate Security Investigation <sup>2</sup>	3
CSS 460	Corporate Security Capstone <sup>2</sup>	3
ENGL 205	Introduction to Professional Writing <sup>1</sup>	3
LEAD 251	Leadership Theory <sup>1</sup>	3
MIS 265	Management Information Systems <sup>1</sup>	3
MIS 301	Practical Computer Security <sup>1</sup>	3
Subtotal		39
<b>Organizational Security Concentration</b>		
CSS 210	Physical Security <sup>2</sup>	3
CSS 240	Security Management <sup>2</sup>	3
CSS 300	Personnel Security	3
CSS 320	Security Risk and Emergency Management <sup>2</sup>	3
MGMT 351	Organizational Behavior <sup>2</sup>	3
Subtotal		15
<b>Major Electives</b>		
Select two of the following:		6
ACCT 322	Business Analysis and Decision Making <sup>1</sup>	
CSS 190	Experimental <sup>2</sup>	
or CSS 290	Experimental	
or CSS 390	Experimental	
CSS 195	Workshop <sup>2</sup>	
or CSS 295	Workshop	
or CSS 395	Workshop	
or CSS 495	Workshop	
CSS 198	Selected Topics <sup>2</sup>	
or CSS 298	Selected Topics	
or CSS 398	Selected Topics	
or CSS 498	Selected Topics	

CSS 360	Specialized Fraud Schemes <sup>2</sup>
CSS 370	Fraud Law and Report Writing <sup>2</sup>
CSS 420	Fraud Examination <sup>2</sup>
CSS 450	Internship <sup>2</sup>
CSS 490	Independent Study <sup>2</sup>
HSS 120	Introduction to Homeland Security <sup>2</sup>
HSS 210	Fundamentals of Terrorism <sup>2</sup>
INDP 348	Sociology of Organizations <sup>1</sup>
LEAD 352	Self Leadership <sup>1</sup>
LEAD 353	Teambuilding for Leaders <sup>1</sup>
MIS 333	Introduction to Computer Forensics <sup>1</sup>
Subtotal	6
Total Hours	60

<sup>1</sup> Course counts for 50% of Major but not Major GPA

<sup>2</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Internships
2. Job Shadowing
3. Security Studies Club
4. Project to End Human Trafficking Club
5. Security Studies Speaker's Series
6. Department of Homeland/Corporate Security Studies Field Trips and Spring Break Trips

CORPORATE SECURITY (5170)

Concentration in Organizational Security (ORGN)

This program is effective as of Fall 2019

Revised 7-2019

UCC 3.26.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CSS 120	Introduction to Private Security	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Creative & Aesthetic Inquiry (p. 29)		3
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
LEAD 251	Leadership Theory	3
ENGL 104	Critical Reading	3
CSS 210	Physical Security	3
MATH 117	Quantitative Reasoning	3
Free Elective		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
ACCT 209	Financial Accounting	3
ENGL 205	Introduction to Professional Writing <sup>1</sup>	3
CSS 240	Security Management	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Free Elective		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
CSS 352	Law & Ethics in the Workplace	3
ACCT 340	Legal Environment of Business	3
MIS 265	Management Information Systems	3
SCI 101	Science of Life	3
Free Elective		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
CSS 300	Personnel Security	3
CSS 351	Fraud	3
MIS 301	Practical Computer Security	3
SCI 102	Understanding the Physical World	3
Social Science Inquiry (p. 29)		3
Free Elective		3
<b>Hours</b>		<b>18</b>
<b>Spring</b>		
CSS 354	Risk Assessment and Fraud Prevention	3
CSS 430	Corporate Security Law	3
MGMT 351	Organizational Behavior	3
Thematic Thread Requirement (p. 29)		3

Major Elective		3
	Hours	15
Fourth Year		
Fall		
CSS 440	Corporate Security Investigation	3
CSS 320	Security Risk and Emergency Management	3
Major Elective		3
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
	Hours	15
Spring		
CSS 460	Corporate Security Capstone	3
Thematic Thread Requirement (p. 29)		3
Major Elective		2-3
Electives		6
	Hours	14-15
	Total Hours**	123-124

<sup>1</sup> The prerequisites for ENGL 205 are ENGL 102 & ENGL 104.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

\* Students are encouraged to take ESAP 101 as a Free Elective.

- CS Organizational Security Major requires 60 Credit Hours (36 Core + 9 General + 9 Culture + 6 Electives).

- The number of free electives will depend on Rock Studies 2 courses taken and/or Minor.

- The number of Rock Studies 2 courses will depend on how much overlap there is between major courses and Rock Studies 2 courses.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 5170

Concentration Code: ORGN

Revised date: 01.28.2021

## Emergency Management, Certificate

The Emergency Management certificate introduces the student to the four phases of managing a disaster: mitigation, preparedness, response, and recovery.

To access Certificate Requirements, please view the Curriculum Guide tab.

## Related Links

Emergency Management, Certificate Program Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/homeland-and-corporate-security/programs/>)

Homeland/Corporate Security Studies Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/homeland-corporate-security-studies/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Certificate GPA: 2.0 or higher

### Certificate Requirements

- These courses are regularly offered through fall, winter, spring and summer rotations that will ensure a 12 month completion period.

Code	Title	Hours
<b>Required Courses</b>		
HSS 130	Principles of Emergency Management	3
HSS 250	Managing Natural, Man-Made and Technological Disasters	3
HSS 360	Social Dimensions of Disaster	3
HSS 380	Crisis & Emergency Risk Communication	3
<b>Total Hours</b>		<b>12</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

CERTIFICATE IN EMERGENCY MANAGEMENT (0700)

Effective Fall 2020

Revised 08.21.2020

UCC 04.21.2020

## Emergency Management, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

The Emergency Management minor provides a foundation on issues related to emergency management including mitigation, preparedness, response, and recovery. Coursework will provide management strategies, tools, and policies essential to disaster preparedness and mitigating the economic and social effects of disasters.

## Related Links

Emergency Management, Minor Program Page (<https://www.sru.edu/academics/online-learning/online-doctoral-and-masters-degree-programs/>)

Homeland/Corporate Security Studies Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/homeland-corporate-security-studies/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses number 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Core Requirements</b>		
HSS 130	Principles of Emergency Management	3
HSS 250	Managing Natural, Man-Made and Technological Disasters	3
HSS 260	Emergency Management Planning	3
HSS 360	Social Dimensions of Disaster	3
<b>Electives</b>		
Select two of the following:		6
HSS 310	Weapons of Mass Destruction	
HSS 370	Research in Disasters and Emergency Management	
HSS 380	Crisis & Emergency Risk Communication	
<b>Total Hours</b>		<b>18</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Minor in Emergency Management (07A)

Effective Fall 2020

Revised 08.21.20

UCC 04.21.20

## Fraud, Certificate

The Fraud Certificate provides an overview of the severity of fraud in organizations and how to prevent, detect, and investigate fraud.

To access Certificate Requirements, please view the Curriculum Guide tab.

## Related Links

Fraud, Certificate Program Page (<https://www.sru.edu/academics/certificates/fraud-certificate/>)

Homeland/Corporate Security Studies Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/homeland-corporate-security-studies/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Certificate GPA: 2.0 or higher

### Certificate Requirements

- These courses are regularly offered through fall, winter, spring and summer rotations that will ensure a 12 month completion period.

Code	Title	Hours
<b>Required Courses</b>		
CSS 120	Introduction to Private Security	3
CSS 351	Fraud	3
CSS 354	Risk Assessment and Fraud Prevention	3
CSS 360	Specialized Fraud Schemes	3
<b>Total Hours</b>		<b>12</b>

- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

CERTIFICATE IN FRAUD (5FRD)

This program is effective as of Summer 2019

Revised 12-2018

## Fraud, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

The Fraud minor provides instruction to students about the various components of internal controls, the types of security breaches organizations encounter, and the uniqueness of fraud in any organization. Students will also learn about the different types of fraud, and the principles of fraud prevention, detection, and how to assess for fraud.

This minor will be of great benefit to any majors. All industries and

organizations are susceptible to fraud, and the minor will be relevant to most careers in management, compliance, accounting, security, and administration. Moreover, the Fraud minor introduces students to the knowledge requirements needed to become Certified Fraud Examiners.

## Related Links

Fraud, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/corporate-security/>)

Homeland/Corporate Security Studies Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/homeland-corporate-security-studies/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses number 300 and above)
- A minor shall be no fewer than 18 credits.
- Students graduating in December 2015 and thereafter may only use 6 credits from their academic major towards the completion of an academic adviser.

Code	Title	Hours
<b>Core Requirements</b>		
CSS 120	Introduction to Private Security	3
CSS 351	Fraud	3
CSS 354	Risk Assessment and Fraud Prevention	3
CSS 360	Specialized Fraud Schemes	3
<b>Electives</b>		
Select two of the following:		6
CSS 210	Physical Security	
CSS 300	Personnel Security	
CSS 430	Corporate Security Law	
CSS 440	Corporate Security Investigation	
<b>Total Hours</b>		<b>18</b>

- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information*



on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN FRAUD (80F)

This program is effective as of Summer 2019

Revised 8-2019

# Homeland Security, Bachelor of Science (BS)

## Program Learning Outcomes

- **Critical Thinking and Problem Solving in Security Studies:** Students will develop critical thinking skills necessary to the identification and response of security threats.
- **Ethics, Values and Morality in Homeland Security Studies:** Students will identify, explain and apply principles of ethics, law, values and morality to security-based scenarios and practices.
- **Multicultural Awareness in Homeland Security Studies:** Students will develop and interpret understanding and knowledge of varied racial, ethnic and cultural entities and explain their role in security-based practices.
- **Professional Communication in Homeland Security Studies:** Students will demonstrate ability to clearly articulate plans, strategies, analyses and other field-based communications in oral and written format, including the use of current technologies and media.
- **Professional Proficiency in Homeland Security Studies:** Students will recognize, explain, report and demonstrate current field-based best practices in security management, threat response, and other knowledge/skills/abilities demanded by the field.
- **Writing Proficiency in Homeland Security Studies:** Students will practice and apply principles of clear, professional, succinct and straightforward writing.

## Related Links

Homeland Security, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/homeland-security/>)

Homeland/Corporate Security Studies Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/homeland-corporate-security-studies/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3

Major Requirements	60
Electives	18

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 30 major credits must be taken at SRU or PASSHE
- 30 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required</b>		
CSS 300	Personnel Security <sup>1</sup>	3
CSS 351	Fraud <sup>1</sup>	3
ENGL 205	Introduction to Professional Writing <sup>2</sup>	3
Subtotal		9
<b>Major Core Courses</b>		
HSS 120	Introduction to Homeland Security <sup>1</sup>	3
HSS 130	Principles of Emergency Management	3
HSS 210	Fundamentals of Terrorism <sup>1</sup>	3
HSS 230	Risk Analysis and Strategic Planning <sup>1</sup>	3
HSS 300	Terrorist Organizations and Lone Wolves <sup>1</sup>	3
HSS 310	Weapons of Mass Destruction <sup>1</sup>	3
HSS 320	Protecting Infrastructure and Key Assets <sup>1</sup>	3
HSS 330	Intelligence Operations <sup>1</sup>	3
HSS 340	Intelligence for Homeland Security <sup>1</sup>	3
HSS 350	Securing Virtual Infrastructure <sup>1</sup>	3
HSS 441	Terrorism, Law and National Security <sup>1</sup>	3
HSS 460	Capstone in Homeland Security <sup>1</sup>	3
Subtotal		36
<b>Cultural Awareness Competency</b>		
Proficiency must be met at the 102 and/or 103 (in place of 103 level course, one of the courses listed below can be taken)		
Select one of the following options:		9
Six to nine credits of ARAB; CHIN; FREN; SPAN; 101, 102, and/or 103 <sup>2</sup>		
Zero to nine credits from the following list: <sup>3,4</sup>		
ARAB 215	Topics in Arabic Culture <sup>2</sup>	
CHIN 306	Survey of Chinese Civilization and Culture <sup>2</sup>	
CHIN 202	Intermediate Chinese I <sup>2</sup>	

FREN 215	Topics in French and Francophone Culture <sup>2</sup>	
HIST 352	Latin America Since 1830 <sup>2</sup>	
HIST 382	Modern Asian Pacific Rim <sup>2</sup>	
HIST 386	Modern China <sup>2</sup>	
HIST 462	The Contemporary Middle East <sup>2</sup>	
HIST 463	Israel-History, State and Society <sup>2</sup>	
INDP 310	Cultural Area Studies <sup>2</sup>	
SPAN 104	Situational Spanish <sup>2</sup>	
SPAN 215	Topics in Hispanic Culture <sup>2</sup>	
SPAN 315	Spanish Study Abroad <sup>2</sup>	
Subtotal		9
Major Electives		
Select two of the following:		6
HSS 190	Experimental <sup>1</sup>	
or HSS 290	Experimental	
or HSS 390	Experimental	
HSS 195	Workshop <sup>1</sup>	
or HSS 295	Workshop	
or HSS 395	Workshop	
or HSS 495	Workshop	
HSS 198	Selected Topics <sup>1</sup>	
or HSS 298	Selected Topics	
or HSS 398	Selected Topics	
or HSS 498	Selected Topics	
HSS 250	Managing Natural, Man-Made and Technological Disasters	
HSS 260	Emergency Management Planning	
HSS 360	Social Dimensions of Disaster	
HSS 370	Research in Disasters and Emergency Management	
HSS 380	Crisis & Emergency Risk Communication	
HSS 450	Internship HS <sup>1</sup>	
HSS 490	Independent Study <sup>1</sup>	
CRIM 343	Criminal Investigations <sup>2</sup>	
LEAD 244	Artificial Intelligence in Cognitive Studies and Film	
LEAD 350	Multicultural Leadership	
LEAD 352	Self Leadership	
LEAD 353	Teambuilding for Leaders	
CSS 352	Law & Ethics in the Workplace <sup>2</sup>	
CSS 354	Risk Assessment and Fraud Prevention <sup>2</sup>	
INDP 321	Minority Groups <sup>2</sup>	
INDP 327	Religion and Society <sup>2</sup>	
INDP 340	Social Inequality <sup>2</sup>	
MIS 301	Practical Computer Security <sup>2</sup>	
MIS 333	Introduction to Computer Forensics <sup>2</sup>	
MS 302	Advanced Military Skills <sup>2</sup>	
MS 401	Leadership Dimensions and Concepts <sup>2</sup>	
PHIL 331	Social and Political Philosophy <sup>2</sup>	
PHIL 341	Philosophy of Religion <sup>2</sup>	
POLS 322	The United Nations and International Law <sup>2</sup>	
POLS 365	International Political Economy <sup>2</sup>	

POLS 403	Constitutional Law <sup>2</sup>	
<b>Subtotal</b>		<b>6</b>
<b>Total Hours</b>		<b>60</b>

- <sup>1</sup> Course counts for 50% of Major requirements and Major GPA
- <sup>2</sup> Course counts for 50% of Major but not Major GPA
- <sup>3</sup> The number of language credits earned above will determine the number of credits needed in this section.
- <sup>4</sup> See adviser for guidance, also refer to your MyRock Audit
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. Internships
2. Job Shadowing
3. Security Studies Club
4. Project to End Human Trafficking Club
5. Security Studies Speaker's Series
6. Department of Homeland/Corporate Security Studies Field Trips and Spring Break Trips

### HOMELAND SECURITY (BS) (51HS)

This program is effective as of Summer 2020

Revised 08.19.20

UCC 04.21.20

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
HSS 120	Introduction to Homeland Security	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
Creative & Aesthetic Inquiry (p. 29)		3
SUBJ 139	Foundations of Academic Discovery <sup>3</sup>	3
Free Elective		3
<b>Hours</b>		<b>16</b>

<b>Spring</b>		
HSS 210	Fundamentals of Terrorism	3
MODL 101	Modern Language Requirement	3
ENGL 104	Critical Reading	3
Humanities Inquiry (p. 29)		3
Free Elective		3
<b>Hours</b>		<b>15</b>

### Second Year

<b>Fall</b>		
MODL 102	Modern Language Requirement	3
ENGL 205	Introduction to Professional Writing <sup>1</sup>	3
HSS 230	Risk Analysis and Strategic Planning	3
MATH 117	Quantitative Reasoning	3
Free Elective		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>

### Spring

HSS 130	Principles of Emergency Management	3
MODL 103	Modern Language Requirement	3
SCI 101	Science of Life	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Social Science Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>

### Third Year

<b>Fall</b>		
CSS 300	Personnel Security	3
CSS 351	Fraud	3
HSS 300	Terrorist Organizations and Lone Wolves	3
HSS 320	Protecting Infrastructure and Key Assets	3
Free Elective		3
<b>Hours</b>		<b>15</b>

### Spring

HSS 310	Weapons of Mass Destruction	3
HSS 330	Intelligence Operations	3
HSS 350	Securing Virtual Infrastructure	3
SCI 102	Understanding the Physical World	3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>

### Fourth Year

<b>Fall</b>		
HSS 340	Intelligence for Homeland Security	3
HSS 441	Terrorism, Law and National Security	3
Major Elective		3
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>

### Spring

HSS 460	Capstone in Homeland Security	3
Thematic Thread Requirement (p. 29)		3

Major Elective	3
Elective	6
<b>Hours</b>	<b>15</b>
<b>Total Hours**</b>	<b>121</b>

- 1 The prerequisites for ENGL 205 are ENGL 102 & ENGL 104.
  - 2 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.
  - 3 Course offered in multiple subjects; cannot take course in first major subject.
- \* Course offered in multiple subjects; cannot take course in first major subject.
- HS Organizational Security Major requires 60 Credit Hours (36 Core + 9 General + 9 Culture + 6 Electives).
  - The number of free electives will depend on Liberal Studies (LS) courses taken and/or Minor.
  - The number of LS courses will depend on how much overlap there is between major courses and LS courses.

Major Code: 51HS

Revised date: 01.28.2021

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

## Homeland Security, Certificate

The Homeland Security Certificate provides the basic foundation about the scope of homeland security, the fundamentals of terrorism, risk analysis, and protecting infrastructure and key assets.

To access Certificate Requirements, please view the Curriculum Guide tab.

### Related Links

Homeland Security, Certificate Program Page (<https://www.sru.edu/academics/certificates/homeland-security-certificate/>)

Homeland/Corporate Security Studies Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/homeland-corporate-security-studies/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Certificate GPA: 2.0 or higher

### Certificate Requirements

- These courses are regularly offered through fall, winter, spring and summer rotations that will ensure a 12 month completion period.

Code	Title	Hours
<b>Required Courses</b>		
CSS 300	Personnel Security	3
HSS 120	Introduction to Homeland Security	3
HSS 210	Fundamentals of Terrorism	3
HSS 230	Risk Analysis and Strategic Planning	3
<b>Total Hours</b>		<b>12</b>

- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

CERTIFICATE IN HOMELAND SECURITY (5HOM)

This program is effective as of Summer 2019

Revised 10-2019

## Homeland Security, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

The Homeland Security minor provided a study of the skills needed to analyze and minimize threats from man-made and natural disasters. The curriculum discusses the foundations of homeland security, terrorism, assessing and analyzing risks, how to protect infrastructure and key assets, and the basics of emergency management.

### Related Links

Homeland Security, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/homeland-security/>)

Homeland/Corporate Security Studies Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/homeland-corporate-security-studies/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU

- A minimum of 6 credit hours must be upper division (courses number 300 and above)
- A minor shall be no fewer than 18 credits

Code	Title	Hours
<b>Core Requirements</b>		
HSS 120	Introduction to Homeland Security	3
HSS 130	Principles of Emergency Management	3
HSS 210	Fundamentals of Terrorism	3
HSS 230	Risk Analysis and Strategic Planning	3
<b>Electives</b>		
Select two of the following:		6
CSS 300	Personnel Security	
CSS 351	Fraud	
HSS 300	Terrorist Organizations and Lone Wolves	
HSS 310	Weapons of Mass Destruction	
HSS 320	Protecting Infrastructure and Key Assets	
<b>Total Hours</b>		<b>18</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN HOMELAND SECURITY (80G)

This program is effective as of Fall 2020

Revised 08.20.20

UCC 04.21.20

## Leadership, Minor

The Leadership Minor is comprised of six courses (18crhs.) from various departments that better prepares students to advance in their professional field as leadership touches all aspects of business and industry. The Leadership Minor serves as an excellent resume builder and will impact **EVERYONE'S** life after graduation, while gaining an understanding and knowledge for future endeavors. Leadership is an extremely broad and ever-growing demand across businesses, organizations, teams, cultures, and our society.

The goal of the Leadership Minor is to focus on helping students gain an initial understanding of those communication and relationship processes they will face while developing their professional lives. Additionally, students will begin to evaluate themselves and their competencies through reflection and problem-solving issues that will positively impact and enhance one's professional growth regardless of your academic major as leadership touches all aspects of life.

### Why select the Leadership Minor?

- You seek to create a culture and drive change.
- You want to develop yourself as a professional and continue to grow.
- You want to inspire, motivate, and build teams that are effective.
- You want to LEAD, and you CARE!

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Leadership, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/leadership-studies/>)

Homeland/Corporate Security and Leadership Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/homeland-and-corporate-security/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Leadership Core Requirements</b>		
LEAD 251	Leadership Theory	3
LEAD 350	Multicultural Leadership	3
LEAD 352	Self Leadership	3
Subtotal		9
<b>Leadership Electives</b>		
Select three of the following:		9
LEAD 144	Introduction to Cognitive Studies	
LEAD 215	Introduction to Consciousness	
LEAD 251	Leadership Theory	
LEAD 253	Online Practical Research	
LEAD 344	Left and Right Brain: From Neuron to Culture	
LEAD 351	Leadership Practicum	
LEAD 353	Teambuilding for Leaders	
LEAD 354	Strategic Planning and Decision Making for Leaders	
LEAD 355	Leadership Development Course	
LEAD 450	Internship	
CSS 352	Law & Ethics in the Workplace	
CSS 354	Risk Assessment and Fraud Prevention	
COMM 215	Small Group Communication	
COMM 217	Intercultural Communication	
COMM 314	Interpersonal Communication	



COMM 315	Organizational Communication
CPSC 102	Collaborative Information Technology and Society
CPSC 300	Challenges of Computer Technology
CRIM 327	Criminal Justice and the Multicultural Community
HSS 120	Introduction to Homeland Security
HSS 230	Risk Analysis and Strategic Planning
INDP 310	Cultural Area Studies
INDP 317	Statistics for the Social Sciences
INDP 318	Research Methods in Interdisciplinary Studies
INDP 321	Minority Groups
INDP 326	Society, Culture and Self
INDP 339	Gender Roles and Society
INDP 348	Sociology of Organizations
MGMT 341	Organizational Leadership
MGMT 351	Organizational Behavior
MIS 443	Project Management
MS 102	Principles of Leadership
MS 100	The American Military Experience
NLPA 120	Civic Engagement and Community Decision-Making
NLPA 305	Financial Best Practices for Decision Makers
PCRM 342	Group Facilitation and Leadership
PHIL 123	Ethics
PHIL 325	Medical/Health Care Ethics
PHIL 326	Business Ethics
PHIL 338	Ethics, Technology, and the Future
SAFE 118	Introduction to Safety
SAFE 448	Management and Integration of Safety
SAFE 488	Safety Training and Development
SPMT 196	Global Sport Management

**Total Hours** 18

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Experiential Learning Activities

Must complete 40 hours of experiential learning activities which are fulfilled by section D above or an approved substitution by the Academic Adviser. Please consult with your Adviser for details of the options available.

Code	Title	Hours
Select courses designated as a Service Learning Component on the Master Class Schedule. Please see adviser or department chairperson for information.		
	Experiential Learning Activities	40
<b>Total Hours</b>		<b>40</b>

## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

Minor in Leadership (98C)

This program is effective as of Summer 2022

Revised 06.02.2022

UCC 04.19.2022

## Organizational Security, Certificate

The Organizational Security certificate designed to enhance student's skills to protect people, property, information, and assets in an organization.

To access Certificate Requirements, please view the Curriculum Guide tab.

## Related Links

Organizational Behavior, Certificate Program Page (<https://www.sru.edu/academics/certificates/organizational-security-certificate/>)

Homeland/Corporate Security Studies Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/homeland-corporate-security-studies/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Certificate GPA: 2.0 or higher

### Certificate Requirements

- These courses are regularly offered through fall, winter, spring and summer rotations that will ensure a 12-month completion period.

Code	Title	Hours
<b>Required Courses</b>		
CSS 120	Introduction to Private Security	3
CSS 210	Physical Security	3
CSS 300	Personnel Security	3
CSS 351	Fraud	3
<b>Total Hours</b>		<b>12</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

CERTIFICATE IN ORGANIZATIONAL SECURITY (50RG)

This program is effective as of Summer 2019

Revised 12-2018

## Organizational Security, Minor

Security issues arise due to crime, man-made disasters, natural disasters, and emergencies and/or accidents which impairs an organization. This minor provides coursework to analyze an organization's security needs to find creative solutions to solve complex security issues.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Organizational Behavior, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/corporate-security/organizational-security-minor-requirements/>)

Homeland/Corporate Security Studies Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/homeland-corporate-security-studies/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses number 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Core Requirements</b>		
CSS 120	Introduction to Private Security	3
CSS 210	Physical Security	3
CSS 300	Personnel Security	3
CSS 351	Fraud	3
<b>Electives</b>		
Select two of the following:		6
CSS 240	Security Management	
CSS 430	Corporate Security Law	

CSS 440

Corporate Security Investigation

**Total Hours**

**18**

- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN ORGANIZATIONAL SECURITY (80H)

Effective Summer 2019

Revised 8.2019

## Languages, Literatures, Cultures, and Writing

Chair	Assistant Chair	Secretary	Location	Department Phone
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Department Web Site URL (<http://www.sru.edu/academics/colleges-and-departments/cia/departments/english/>)

English Fact Sheet (<https://www.sru.edu/documents/programs/factsheets/undergraduate/english-fs.pdf>)

Modern Languages Fact Sheet (<https://www.sru.edu/documents/programs/factsheets/undergraduate/mlc-fs.pdf>)

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M.A., University of Missouri-Columbia

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Instructor  
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B.A., Youngstown State University

## Programs

### Majors

- English Literature, Bachelor of Arts (BA) - Concentration in Language and Literature (p. 916)
- English Literature, Bachelor of Arts (BA) - Concentration in Literary, Film, and Cultural Studies (p. 919)
- English Writing, Bachelor of Science (BS) - Concentration in Creative Writing (p. 922)
- English Writing, Bachelor of Science (BS) - Concentration in Professional Writing (p. 926)
- Modern Languages and Cultures, Bachelor of Arts (BA) - Concentration in Cultural Area Studies (p. 933)
- Modern Languages and Cultures, Bachelor of Arts (BA) - Concentration in French (p. 936)
- Modern Languages and Cultures, Bachelor of Arts (BA) - Concentration in Professional French (p. 939)
- Modern Languages and Cultures, Bachelor of Arts (BA) - Concentration in Spanish (p. 942)
- Modern Languages and Cultures, Bachelor of Arts (BA) - Concentration in Professional Spanish (p. 945)

### Minors

- Arabic, Minor (p. 914)
- Asian Studies, Minor (p. 915)

- Film and Media Studies, Minor (p. 929)
- French, Minor (p. 929)
- Literature, Minor (p. 932)
- Professional French, Minor (p. 948)
- Professional Japanese, Minor (p. 949)
- Professional Spanish, Minor (p. 949)
- Spanish, Minor (p. 950)
- Writing, Minor (p. 951)

## Certificates

- Creative Writing and Book Arts, Certificate (p. 915)
- Global Learning and Cultural Competence - Japanese Studies, Certificate (p. 930)
- Global Learning and Cultural Competence - Professional Spanish, Certificate (p. 931)
- Latin American Studies, Certificate (p. 931)
- Middle Eastern Studies, Certificate (p. 933)

## Arabic, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Arabic, Minor Program Page ([https://www.sru.edu/academics/majors-and-minors/arabic-\(minor\)/](https://www.sru.edu/academics/majors-and-minors/arabic-(minor)/))

Languages, Literatures, Cultures, and Writing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/languages-literatures-cultures-and-writing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

GPA: 2.00 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (an upper division course includes any 3 credit course that requires a pre-requisite)
- A minor shall be no fewer than 18 credits.
- Minimum 2.0 CGPA

Code	Title	Hours
<b>Required Courses</b>		
ARAB 101	Arabic Language and Culture I <sup>1</sup>	3
ARAB 102	Arabic Language and Culture II <sup>1</sup>	3
ARAB 103	Arabic Language and Culture III <sup>1</sup>	3
ARAB 202	Intermediate Arabic I <sup>1</sup>	3
Select two of the following:		6
ARAB 300	Reading & Writing in Arabic <sup>1</sup>	
ARAB 301	Arabic Conversation I <sup>1</sup>	

ARAB 315 Arabic Study Abroad <sup>1</sup>

Total Hours	18
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<sup>1</sup> A grade of "C" or better is required.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN ARABIC (03A)

This program is effective as of Fall 2019

Revised 04.09.2020

UCC 3.26.2019

## Asian Studies, Minor

Students from any major can take courses in Asian Studies to fulfill the Diversity/Rock Studies Requirement Block such as Asian Literature, which is one of the Core courses required to complete the Asian Studies Minor.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Asian Studies, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/asian-studies-minor/>)

Languages, Literatures, Cultures, and Writing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/languages-literatures-cultures-and-writing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU.
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above).
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Course</b>		
MODL 105	Introduction to Asian Civilizations	3

### Core Courses

Select three of the following:	9
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ENGL 248	Asian Literature
ENGL 316	Asian Film
HIST 376	Modern Japan
HIST 381	East Asian Military Traditions
HIST 382	Modern Asian Pacific Rim
HIST 386	Modern China
GES 303	Asia
PHIL 343	Asian Philosophy
INDP 310	Cultural Area Studies (Asian Topics Only)
INDP 360	Issues in Asia; Women in Asian Societies

### Required Third Semester Proficiency

Select three courses from Chinese, Korean, or Japanese of the following:	9
--	---

CHIN 101	Chinese Language and Culture I <sup>1</sup>
CHIN 102	Chinese Language and Culture II <sup>1</sup>
CHIN 103	Chinese Language and Culture III <sup>1</sup>
CHIN 202	Intermediate Chinese I <sup>1</sup>
JAPN 101	Japanese Language and Culture I <sup>1</sup>
JAPN 102	Japanese Language and Culture II <sup>1</sup>
JAPN 103	Japanese Language and Culture III <sup>1</sup>
JAPN 202	Intermediate Japanese I <sup>1</sup>
KORN 101	Korean Language and Culture I <sup>1</sup>
KORN 102	Korean Language and Culture II <sup>1</sup>
KORN 103	Korean Language and Culture III <sup>1</sup>
KORN 202	Intermediate Korean I <sup>1</sup>

Total Hours	21
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<sup>1</sup> A grade of "C" or better is required.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Minor in Asian Studies (54C)

This program is effective as of Spring 2019

Revised 8-2019

## Creative Writing and Book Arts, Certificate

To access Certificate Requirements, please view the Curriculum Guide tab.



## Related Links

Creative Writing and Book Arts, Certificate Program Page (<https://www.sru.edu/academics/certificates/creative-writing-and-book-arts-certificate/>)

Languages, Literatures, Cultures, and Writing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/languages-literatures-cultures-and-writing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Certificate GPA: 2.0 or higher

### Certificate Requirements

Code	Title	Hours
<b>Required Courses:</b>		<b>6</b>
ENGL 225	Introduction to Creative Writing	
ENGL 330	Literary Publications & Design (capstone course)	
<b>Elective Courses:</b>		<b>6</b>
ART 105	Basic Studio Drawing <sup>1</sup>	
ART 107	Basic Studio Photography <sup>1</sup>	
ART 108	Basic Studio Printmaking <sup>1</sup>	
ENGL 298	Selected Topics	
GES 205	Cultural Geography	
GES 331	Economic Geography	
HIST 205	The Historian's Craft	
GNDR 115	Introduction to Gender Studies	
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> Upper level studio art courses (ART 205, ART 207, ART 208, ART 211, ART 213, ART 305- ART 311) may be substituted at the discretion of the English Department Chair.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

CERTIFICATE IN CREATIVE WRITING AND BOOK ARTS (5123)  
Effective Spring 2015  
Revised 10-2019

## English Literature, Bachelor of Arts (BA) - Concentration in Language and Literature

Students pursuing a B.S. in Secondary Education must take the following courses within the Language and Literature concentration to fulfill NCATE and PDE requirements. These courses include: ENGL 204, ENGL 305, ENGL 307, and ENGL 328. Secondary Education majors should work closely with their academic advisers.

Students pursuing a B.A. in English: Language and Literature without the B.S. in Secondary Education may take approved electives. Choose from the following: ENGL 248, ENGL 298, ENGL 311, ENGL 410 or any course listed below that has not already been taken. Approval by academic adviser and department chair is required.

## Program Learning Outcomes

### English Literature - Language and Literature, BA

- Interaction with Diverse Literary Texts: Display knowledge of discipline specific content through written and oral interaction with diverse literary and cultural texts.
- Methods of Discipline Specific Analysis: Apply principle methods of discipline specific analysis, and understand the basic assumptions and theoretical constructs that guide criticism
- Literature and Language as Cultural Artifacts: Express how literature and language, as cultural artifacts, respond to and record the value systems of diverse cultures and human experiences

### Universal Program Outcomes

- Research Tools and Resources: Use the research tools and resources of the profession, integrate them effectively into interpretive arguments, and properly document sources according to professional standards.
- Knowledge of Technology: Display knowledge of technologies that support both written and oral communication.
- Degree Program Writing Competency - Understanding of the Writing Process : Understand the writing process to communicate ideas effectively to a variety of audiences.

## Related Links

English Literature - Language and Literature, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/english-language-and-literature/>)

Languages, Literatures, Cultures, and Writing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/languages-literatures-cultures-and-writing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

**Summary\***

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Modern Language Requirement	0-9
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	39
	Electives	39

\* All undergraduate degree programs require a minimum of 120 credits.  
Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

**Rock Studies 2 Requirements**

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

**BA Modern Language Requirement**

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
Complete 0-9 credits		0-9
<b>Total Hours</b>		<b>0-9</b>

**Basic Math Requirement**

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

**Computer Competency**

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

**DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT**

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

**Major/Concentration Requirements**

- 20 major credits must be taken at SRU or PASSHE
- 20 major credits must be taken at the 300 level or above
- Students pursuing a B.S. in Secondary Education must take this course option to fulfill NCATE and PDE requirements: ENGL 204, ENGL 305, ENGL 307, ENGL 328 (by advisement for Ed. Majors).
- Students pursuing a B.A. in Language and Literature without the B.S. in Secondary Education may take the other designated courses in lieu of these. For electives, choose from among: ENGL 248 (Eastern Lit), ENGL 298 (Selected Topics), ENGL 311 (Chaucer), ENGL 410 (Lit of the Env), a course listed above that you have not already taken, or another course approved by your adviser and the department chair.

Code	Title	Hours
<b>Required Courses</b>		
ENGL 204	Composition and Rhetoric <sup>1</sup>	3
or ENGL 220	Introduction to Literary and Cultural Studies	
ENGL 312	Introduction to Shakespeare <sup>1</sup>	3
or ENGL 389	Stratford Shakespeare Tour	
ENGL 317	British Literature I <sup>1</sup>	3
ENGL 318	British Literature II <sup>1</sup>	3

ENGL 319	American Literature I <sup>1</sup>	3
ENGL 320	American Literature II <sup>1</sup>	3
ENGL 402	World Literature <sup>1</sup>	3
ENGL 403	Literary and Cultural Theory <sup>1</sup>	3
Subtotal		24

**Required English Courses**

Select two of the following:		6
ENGL 230	Introduction to Linguistics and Grammar <sup>1</sup>	
ENGL 311	Chaucer and Medieval Culture <sup>1</sup>	
ENGL 331	Historical Development of the English Language <sup>1</sup>	
ENGL 332	Modern English Grammar and Syntax <sup>1</sup>	
Subtotal		6

**Required English Literature Course**

Select one of the following:		3
ENGL 242	African-American Literature <sup>1</sup>	
ENGL 243	Literature of the Women's Movement <sup>1</sup>	
ENGL 244	Native American Literature <sup>1</sup>	
ENGL 246	U.S. Latino/a Literatures <sup>1</sup>	
ENGL 248	Asian Literature <sup>1</sup>	
Subtotal		3

**Electives**

Select any two English courses: <sup>2</sup>		6
Subtotal		6

**Total Hours** **39**

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> Except for ENGL 102

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**Co-curricular and Experiential Learning**

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term) locations such as Italy, London and Canada
2. Student-faculty research
3. Career education and development
4. Internships
5. Community services experience through the national Writing in Schools program
6. Volunteer experience in literary magazine production

English Literature - BA (5 25)

Concentration in Language and Literature (LLIT)

This program is effective as of Fall 2019

Revised 7-2019

UCC RISP 2019

**Important Curriculum Guide Notes**

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled

SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

**Recommended Four-Year Plan**

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
ESAP 101	FIRST Seminar *	1
MATH 117	Quantitative Reasoning	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
MODL 101	Modern Language Requirement	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
MODL 102	Modern Language Requirement	3
SCI 101	Science of Life	3
Creative & Aesthetic Inquiry (p. 29)		3
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
Select one English Elective <sup>2</sup>		3
MODL 103	Modern Language Requirement	3
ENGL 220	Introduction to Literary and Cultural Studies (Inquiry) <sup>3</sup>	3
SCI 102	Understanding the Physical World	3
Social Science Inquiry (p. 29) <sup>4</sup>		3
Declare a Thematic Thread <sup>10</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Select one English Elective <sup>2</sup>		3
ENGL 242	African-American Literature <sup>5</sup>	3
or ENGL 248	or Asian Literature	
ENGL 204	Composition and Rhetoric <sup>4</sup>	3
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
Select one of the following:		3
ENGL 243	Literature of the Women's Movement	
ENGL 244	Native American Literature	

ENGL 246	U.S. Latino/a Literatures <sup>6</sup>	
ENGL 317	British Literature I	3
ENGL 331	Historical Development of the English Language <sup>7</sup>	3
Thematic Thread Requirement (p. 29)		3
Course in other department/minor		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ENGL 312	Introduction to Shakespeare	3
ENGL 318	British Literature II	3
ENGL 332	Modern English Grammar and Syntax <sup>8</sup>	3
Thematic Thread Requirement (p. 29)		3
Course in other department/minor		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
ENGL 319	American Literature I	3
ENGL 402	World Literature	3
Elective		3
Course in other department/minor		3
Course in other department/minor		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ENGL 320	American Literature II	3
Select one of the following:		3
ENGL 403	Literary and Cultural Theory	
ENGL Elective <sup>9</sup>		
Select one of the following:		3
ENGL Elective <sup>2</sup>		
ENGL 410	Literature of the Environment	
Another course approved by your adviser & dept. chair		
Course in other department/minor		3
Course in other department/minor		3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Must complete two courses from the following: ENGL 230, ENGL 311, ENGL 331, ENGL 332

<sup>3</sup> IF not selecting ENGL 204 Comp and Rhetoric.

<sup>4</sup> Take only if not selecting ENGL 220.

<sup>5</sup> If not taking ENGL 243, ENGL 244, or ENGL 246.

<sup>6</sup> If not taking ENGL 242 or ENGL 248.

<sup>7</sup> If not taking ENGL 332.

<sup>8</sup> If not taking ENGL 331.

<sup>9</sup> ENGL 328, ENGL 410

<sup>10</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please

consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 5 25

Concentration Code: LLIT

Revised date: 12.22.2020

## English Literature, Bachelor of Arts (BA) - Concentration in Literary, Film, and Cultural Studies

### PROGRAM LEARNING OUTCOMES

#### ENGLISH LITERATURE - LITERARY, FILM, AND CULTURAL STUDIES, BA

- Interaction with Diverse Literary Texts: Display knowledge of discipline specific content through written and oral interaction with diverse literary and cultural texts.
- Methods of Discipline Specific Analysis: Apply principle methods of discipline specific analysis, and understand the basic assumptions and theoretical constructs that guide criticism
- Literature and Language as Cultural Artifacts: Express how literature and language, as cultural artifacts, respond to and record the value systems of diverse cultures and human experiences

### UNIVERSAL PROGRAM OUTCOMES

- Research Tools and Resources: Use the research tools and resources of the profession, integrate them effectively into interpretive arguments, and properly document sources according to professional standards.
- Knowledge of Technology: Display knowledge of technologies that support both written and oral communication.
- Degree Program Writing Competency - Understanding of the Writing Process : Understand the writing process to communicate ideas effectively to a variety of audiences.

## RELATED LINKS

English Literature - Literary, Film, and Cultural Studies, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/english-literary-film-and-cultural-studies/>)

Languages, Literatures, Cultures, and Writing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/languages-literatures-cultures-and-writing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Modern Language Requirement	0-9

Other Basic Requirements	0-3
Computer Competency	0-3
Major/Concentration Requirements	39
Electives	39

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
Complete 0-9 credits		0-9
<b>Total Hours</b>		<b>0-9</b>

Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

MAJOR/CONCENTRATION REQUIREMENTS

- 20 major credits must be taken at SRU or PASSHE
- 20 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required English Courses</b>		
ENGL 214	Introduction to Film Analysis <sup>1</sup>	3
ENGL 220	Introduction to Literary and Cultural Studies <sup>1</sup>	3
ENGL 403	Literary and Cultural Theory <sup>1</sup>	3
<b>Interpreting Literary Traditions</b>		<b>6</b>
Select two of the following:		
ENGL 312	Introduction to Shakespeare <sup>1</sup>	
or ENGL 389		Stratford Shakespeare Tour
ENGL 317	British Literature I <sup>1</sup>	
ENGL 318	British Literature II <sup>1</sup>	
ENGL 319	American Literature I <sup>1</sup>	
ENGL 320	American Literature II <sup>1</sup>	
<b>Interpreting Culture &amp; Environments</b>		<b>6</b>
Select two of the following:		
ENGL 238	Video Games as Literature	
ENGL 243	Literature of the Women's Movement <sup>1</sup>	
ENGL 298	Selected Topics <sup>1,2</sup>	
ENGL 311	Chaucer and Medieval Culture <sup>1</sup>	
ENGL 328	Young Adult Literature <sup>1</sup>	



ENGL 410	Literature of the Environment <sup>1</sup>	
<b>Interpreting Film</b>		<b>6</b>
Select two of the following:		
ENGL 298	Selected Topics <sup>1,3</sup>	
ENGL 314	European Film <sup>1</sup>	
ENGL 316	Asian Film <sup>1</sup>	
ENGL 498	Selected Topics <sup>1,4</sup>	
<b>Interpreting Diverse Texts</b>		<b>6</b>
Select two from the following:		
ENGL 242	African-American Literature <sup>1</sup>	
ENGL 244	Native American Literature <sup>1</sup>	
ENGL 246	U.S. Latino/a Literatures <sup>1</sup>	
ENGL 248	Asian Literature <sup>1</sup>	
ENGL 300	Queer Literature and Film <sup>1</sup>	
ENGL 402	World Literature <sup>1</sup>	
<b>Writing Culture</b>		<b>3</b>
Select one of the following:		
ENGL 225	Introduction to Creative Writing	
ENGL 205	Introduction to Professional Writing	
ENGL 307	Writing About Electronic Media and Film <sup>1</sup>	
ENGL 315	The Cinematic Review: Historical and Critical Writing <sup>1</sup>	
ENGL 349	Creative Writing: Screenplay	
ENGL 339	Creative Writing: Fiction <sup>1</sup>	
<b>Capstone Experience Requirement</b>		<b>3</b>
ENGL 409	Professional English <sup>1</sup>	
ENGL 450	Internship <sup>1</sup>	
<b>Total Hours</b>		<b>39</b>

- <sup>1</sup> Course counts for 50% of Major requirements and Major GPA
- <sup>2</sup> Select Interpreting Culture and Environment ENGL 298 topics from:
- Apocalyptic Literature
  - Literary Pirates
  - Nobel and Pulitzer Literature
  - Dante and Our Journeys
- <sup>3</sup> Select Interpreting Film Block ENGL 298 topic:
- American Drama to Film
- <sup>4</sup> Select Interpreting Film Block ENGL 298 topic:
- Alfred Hitchcock and His Imitators
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## CO-CURRICULAR AND EXPERIENTIAL LEARNING

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term) locations such as Italy, London and Canada
2. Student-faculty research
3. Career education and development
4. Internships

5. Community services experience through the national Writing in Schools program
6. Volunteer experience in literary magazine production

English Literature - BA (5 25)

Concentration in Literary, Film, and Cultural Studies (LTSC)

This program is effective as of Fall 2022

Revised 02.21.2022

UCC: 09.21.2021

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

## RECOMMENDED FOUR-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
ESAP 101	FIRST Seminar *	1
MATH 117	Quantitative Reasoning	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Modern Language I		3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
Modern Language II		3
Creative & Aesthetic Inquiry (p. 29)		3
Humanities Inquiry (p. 29)		3
SCI 101	Science of Life	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
ENGL 220	Introduction to Literary and Cultural Studies (Inquiry)	3
ENGL 298	Selected Topics	3
SCI 102	Understanding the Physical World	3
Modern Language III		3
Social Science Inquiry (p. 29)		3
Declare a Thematic Thread <sup>8</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Thematic Thread Requirement (p. 29)		3

Thematic Thread Requirement (p. 29)	3
Thematic Thread Requirement (p. 29)	3
Course in other department/minor or elective	3
Select one of the following:	3
ENGL 230 Introduction to Linguistics and Grammar <sup>2</sup>	
ENGL 242 African-American Literature	
ENGL Elective	
<b>Hours</b>	<b>15</b>

**Third Year****Fall**

ENGL 311 Chaucer and Medieval Culture	3
or ENGL 317 or British Literature I	
or ENGL 319 or American Literature I	
ENGL 242 African-American Literature	3
or ENGL 244 or Native American Literature	
or ENGL 246 or U.S. Latino/a Literatures	
Select one of the following:	3
ENGL 331 Historical Development of the English Language <sup>3</sup>	
ENGL Elective <sup>4</sup>	
Thematic Thread Requirement (p. 29)	3
Course in other department/minor	3
<b>Hours</b>	<b>15</b>

**Spring**

ENGL 214 Introduction to Film Analysis	3
Select one of the following:	3
ENGL 312 Introduction to Shakespeare	
ENGL 318 British Literature II	
ENGL 389 Stratford Shakespeare Tour	
ENGL 320 American Literature II	3
or ENGL 242 or African-American Literature	
Select one of the following:	3
ENGL 332 Modern English Grammar and Syntax <sup>5</sup>	
ENGL Elective <sup>6</sup>	
Course in other department/minor	3
<b>Hours</b>	<b>15</b>

**Fourth Year****Fall**

ENGL 402 World Literature	3
ENGL 409 Professional English	3
Course in other department/minor	3
Select one of the following:	3
ENGL 403 Literary and Cultural Theory	
ENGL Elective <sup>4</sup>	
Select one of the following:	3
ENGL 307 Writing About Electronic Media and Film	
ENGL 314 European Film	
ENGL 316 Asian Film	
<b>Hours</b>	<b>15</b>

**Spring**

Select one of the following:	3
ENGL 328 Young Adult Literature	
ENGL 410 Literature of the Environment	

Select one of the following:	3
ENGL 403 Literary and Cultural Theory	
ENGL Elective <sup>7</sup>	
Select one of the following:	3
ENGL 205 Introduction to Professional Writing	
ENGL 225 Introduction to Creative Writing	
ENGL 315 The Cinematic Review: Historical and Critical Writing	
ENGL 339 Creative Writing: Fiction	
Course in other department/minor	3
Course in other department/minor	3
<b>Hours</b>	<b>15</b>
<b>Total Hours**</b>	<b>121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> If not taking ENGL 331 or ENGL 332.

<sup>3</sup> If not taking ENGL 230 or ENGL 332.

<sup>4</sup> ENGL 243, ENGL 248, ENGL 298

<sup>5</sup> If not taking ENGL 230 or ENGL 331.

<sup>6</sup> ENGL 242, ENGL 298, ENGL 328, ENGL 410.

<sup>7</sup> ENGL 328, ENGL 410

<sup>8</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 5 25

Concentration Code: LTSC

Revised: 12.22.2020

## English Writing, Bachelor of Science (BS) - Concentration in Creative Writing

### Program Learning Outcomes

#### English Writing - Creative Writing, BS

- Development of Research Strategies: Develop strategies for research and integrating the results of this research into various creative texts.
- Knowledge of Traditional and Contemporary Techniques: Produce texts that will demonstrate knowledge of traditional and contemporary/experimental techniques in various creative writing genres.
- Demonstrate Proficiency in Manuscript Preparation: Produce texts that will demonstrate a proficiency in preparing manuscripts in various genres for submission for print and electronic publications.

#### Universal Program Outcomes

- Research Tools and Resources: Use the research tools and resources of the profession, integrate them effectively into interpretive

arguments, and properly document sources according to professional standards.

- Knowledge of Technology: Display knowledge of technologies that support both written and oral communication.
- Degree Program Writing Competency - Understanding of the Writing Process : Understand the writing process to communicate ideas effectively to a variety of audiences.

## Related Links

English Writing - Creative Writing, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/english-creative-writing/>)

Languages, Literatures, Cultures, and Writing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/languages-literatures-cultures-and-writing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.00 or higher

Overall GPA: 2.00 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	45
	Electives	33

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		

SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

### Major/Concentration Requirements

- 23 major credits must be taken at SRU or PASSHE
- 23 major credits must be taken at the 300 level or above
- Fifteen credits are required in the same course prefix **other** than ENGL (e.g., HIST, SPAN, ART, PHIL, CPSC, etc.) or a minor or certificate or a major in a subject **other** than ENGL (15 credits) – Refer to My Rock Audit

Code	Title	Hours
<b>Writing Workshops: Required English Courses</b>		
ENGL 205	Introduction to Professional Writing <sup>1</sup>	3
ENGL 225	Introduction to Creative Writing <sup>1</sup>	3
ENGL 330	Literary Publications & Design <sup>1</sup>	3
ENGL 334	Writing Community Stories <sup>1</sup>	3
ENGL 338	Creative Writing: Creative Nonfiction <sup>1</sup>	3
ENGL 339	Creative Writing: Fiction <sup>1</sup>	3
ENGL 340	Creative Writing: Poetry <sup>1</sup>	3
ENGL 346	Writing the Graphic Novel <sup>1</sup>	3
ENGL 429	Grant and Proposal Writing <sup>1</sup>	3
Subtotal		27
<b>Writing and Theory</b>		
Select one of the following:		3
ENGL 204	Composition and Rhetoric <sup>1</sup>	
ENGL 307	Writing About Electronic Media and Film <sup>1</sup>	
ENGL 327	Healthcare Writing <sup>1</sup>	
ENGL 335	Writing for Video Games <sup>1</sup>	
ENGL 349	Creative Writing:Screenplay	
Subtotal		3
<b>Literature Courses</b>		
Select three of the following:		9
ENGL 312	Introduction to Shakespeare <sup>1</sup>	
or ENGL 389	Stratford Shakespeare Tour	
ENGL 242	African-American Literature <sup>1</sup>	
ENGL 243	Literature of the Women's Movement <sup>1</sup>	
ENGL 244	Native American Literature <sup>1</sup>	
ENGL 246	U.S. Latino/a Literatures <sup>1</sup>	
ENGL 248	Asian Literature <sup>1</sup>	
ENGL 298	Selected Topics <sup>1,2</sup>	
ENGL 311	Chaucer and Medieval Culture <sup>1</sup>	
ENGL 317	British Literature I <sup>1</sup>	
ENGL 318	British Literature II <sup>1</sup>	
ENGL 319	American Literature I <sup>1</sup>	
ENGL 320	American Literature II <sup>1</sup>	
ENGL 328	Young Adult Literature <sup>1</sup>	
ENGL 402	World Literature <sup>1</sup>	
ENGL 410	Literature of the Environment <sup>1</sup>	
Subtotal		9
<b>Capstone Experience – Part I</b>		
ENGL 409	Professional English <sup>1</sup>	3
Subtotal		3
<b>Capstone Experience – Part II</b>		
Select one of the following options:		3
<i>Option 1 - If below a 3.0 Overall GPA</i>		
Select one additional literature course from the Required Literature Course listing above		
<i>Option 2 - If at a 3.0 or above Overall GPA</i>		
Select one of the following:		
One additional literature course from the Required Literature Course from the listing above		
ENGL 491	Senior Writing Project <sup>1</sup>	

Subtotal	3
<b>Total Hours</b>	<b>45</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> May be taken twice as different topics.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term) locations such as Italy, London and Canada
2. Student-faculty research
3. Career education and development
4. Internships
5. Community services experience through the national Writing in Schools program
6. Volunteer experience in literary magazine production

ENGLISH WRITING - BS (5120)

Concentration in Creative Writing - (CREA)

This program is effective as of Summer 2021

Revised 04.20.2021

UCC 09.01.2020

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

Student pursuing a B.S. in English - Creative Writing must also complete 15 credits hours or more outside the English Department in a sequence from one department, or of a minor or major, in a subject other than English. The selection of outside courses must be approved by the student's English adviser and by the Chair of the English Department

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
MATH 117	Quantitative Reasoning	3
SCI 101	Science of Life	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Select one of the following:		3

COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
ART 105	Basic Studio Drawing	3
SCI 102	Understanding the Physical World	3
Humanities Inquiry (p. 29)		3
Social Science Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
ENGL 205	Introduction to Professional Writing	3
ENGL 225	Introduction to Creative Writing	3
Select one of the following:		3
ENGL 243	Literature of the Women's Movement <sup>2</sup>	
ENGL 244	Native American Literature <sup>2</sup>	
ENGL 246	U.S. Latino/a Literatures <sup>3</sup>	
ENGL 298	Selected Topics	
Course in other department/thematic thread		3
Thematic Thread Requirement (p. 29)		3
Declare a Thematic Thread <sup>6</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Course in another department/thematic thread		3
Thematic Thread Requirement (p. 29)		3
ENGL 339	Creative Writing: Fiction	3
Select one of the following:		3
ENGL 242	African-American Literature <sup>4</sup>	
ENGL 248	Asian Literature <sup>5</sup>	
ENGL 300	Queer Literature and Film <sup>5</sup>	
ENGL 312	Introduction to Shakespeare	
Select one of the following:		3
ENGL 204	Composition and Rhetoric <sup>6</sup>	
ENGL 327	Healthcare Writing	
ENGL 335	Writing for Video Games <sup>5</sup>	
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
ENGL 334	Writing Community Stories	3
Course in another department/thematic thread		3
Select two of the following:		6
ENGL 307	Writing About Electronic Media and Film (if needed or select course in another department/thematic thread)	
ENGL 338	Creative Writing: Creative Nonfiction <sup>6</sup>	
ENGL 340	Creative Writing: Poetry <sup>7</sup>	
Select one of the following:		3
ENGL 243	Literature of the Women's Movement <sup>2</sup>	
ENGL 244	Native American Literature <sup>2</sup>	
ENGL 246	U.S. Latino/a Literatures <sup>3</sup>	

ENGL 298	Selected Topics	
ENGL 311	Chaucer and Medieval Culture <sup>3</sup>	
ENGL 317	British Literature I	
ENGL 319	American Literature I	
ENGL 402	World Literature	
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ENGL 330	Literary Publications & Design (if not taking semester 8) <sup>4</sup>	3
ENGL 346	Writing the Graphic Novel (if not taking semester 8) <sup>4</sup>	3
ENGL 429	Grant and Proposal Writing (if not taking semester 8) <sup>4</sup>	3
Select one of the following:		3
ENGL 242	African-American Literature <sup>4</sup>	
ENGL 248	Asian Literature <sup>5</sup>	
ENGL 300	Queer Literature and Film	
ENGL 312	Introduction to Shakespeare	
Course in another department/thematic Thread		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
Select one of the following:		3
ENGL 334	Writing Community Stories	
Course in another department/thematic thread		
ENGL 409	Professional English	3
ENGL 491	Senior Writing Project (or additional Literature course)	3
Select one of the following:		3
ENGL 338	Creative Writing: Creative Nonfiction <sup>6</sup>	
ENGL 340	Creative Writing: Poetry <sup>7</sup>	
Course in other department/thematic thread		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ENGL 330	Literary Publications & Design (if not taking semester 6) <sup>4</sup>	3
ENGL 346	Writing the Graphic Novel <sup>4</sup>	3
ENGL 429	Grant and Proposal Writing <sup>4</sup>	3
ENGL 491	Senior Writing Project (or additional Literature course) <sup>7</sup>	3
Course in other department/thematic thread		3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Offered even numbered fall term.

<sup>3</sup> Offered odd numbered fall term.

<sup>4</sup> Offered even numbered spring term.

<sup>5</sup> Offered even number spring term

<sup>6</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.



- <sup>7</sup> Select additional Literature course from the following:  
ENGL 242 (offered odd numbered spring term), ENGL 248 (offered even number spring term), ENGL 300, or ENGL 312.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 5120

Concentration Code: CREA

Revised date: 12.22.2020

# English Writing, Bachelor of Science (BS) - Concentration in Professional Writing

## Program Learning Outcomes

### English Writing - Professional Writing, BS

- Production of Problem Solving Documents: Produce documents that solve problems relevant to professional and organizational contexts.
- Document Adaptation: Adapt documents to different rhetorical contexts.
- Evaluation of Rhetorical Values: Evaluate the rhetorical values of technical writing using the theory and scholarship of technical and professional communication.
- Application of Technical Editing Principles: Apply principles of technical editing for document development, publication, and use.

### Universal Program Outcomes

- Research Tools and Resources: Use the research tools and resources of the profession, integrate them effectively into interpretive arguments, and properly document sources according to professional standards.
- Knowledge of Technology: Display knowledge of technologies that support both written and oral communication.
- Degree Program Writing Competency - Understanding of the Writing Process : Understand the writing process to communicate ideas effectively to a variety of audiences.

## Related Links

English Writing - Professional Writing, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/english-professional-writing/>)

Languages, Literatures, Cultures, and Writing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/languages-literatures-cultures-and-writing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	45
	Electives	33

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	

**Total Hours** **0-3**

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		

Select one of the following at SRU or another post-secondary institution:

CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	

**Total Hours** **0-3**

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- 23 major credits must be taken at SRU or PASSHE
- 23 major credits must be taken at the 300 level or above
- Fifteen credits are required outside the English department from one department or a minor or certificate or a major in a subject other than English – Refer to My Rock Audit

Code	Title	Hours
<b>Required Concentration Courses</b>		
ENGL 204	Composition and Rhetoric <sup>1</sup>	3
ENGL 205	Introduction to Professional Writing <sup>1</sup>	3
ENGL 225	Introduction to Creative Writing <sup>1</sup>	3
ENGL 327	Healthcare Writing <sup>1</sup>	3
ENGL 330	Literary Publications & Design <sup>1</sup>	3
ENGL 334	Writing Community Stories	3
ENGL 335	Writing for Video Games	3
ENGL 365	Writing for the World Wide Web <sup>1</sup>	3
ENGL 429	Grant and Proposal Writing	3
Subtotal		27
<b>Required Internship</b>		
ENGL 450	Internship <sup>1</sup>	3
Subtotal		3
<b>Required Language and Literature Course</b>		
ENGL 403	Literary and Cultural Theory <sup>1</sup>	3
Subtotal		3
<b>Required Language and Literature Courses</b>		
Select two of the following:		6
ENGL 312	Introduction to Shakespeare <sup>1</sup>	
or ENGL 389	Stratford Shakespeare Tour	

ENGL 242	African-American Literature <sup>1</sup>	
ENGL 243	Literature of the Women's Movement <sup>1</sup>	
ENGL 244	Native American Literature <sup>1</sup>	
ENGL 246	U.S. Latino/a Literatures <sup>1</sup>	
ENGL 248	Asian Literature <sup>1</sup>	
ENGL 298	Selected Topics <sup>1</sup>	
ENGL 311	Chaucer and Medieval Culture <sup>1</sup>	
ENGL 317	British Literature I <sup>1</sup>	
ENGL 318	British Literature II <sup>1</sup>	
ENGL 319	American Literature I <sup>1</sup>	
ENGL 320	American Literature II <sup>1</sup>	
ENGL 402	World Literature <sup>1</sup>	
ENGL 410	Literature of the Environment	
Subtotal		6

### Required Language and Literature Courses

Select one of the following:		3
ENGL 230	Introduction to Linguistics and Grammar <sup>1</sup>	
ENGL 331	Historical Development of the English Language <sup>1</sup>	
ENGL 332	Modern English Grammar and Syntax <sup>1</sup>	
Subtotal		3

### Required Capstone Experience (only offered in Spring)

ENGL 409	Professional English	3
Subtotal		3
<b>Total Hours</b>		<b>45</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> May be taken twice as different topics.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term) locations such as Italy, London and Canada
2. Student-faculty research
3. Career education and development
4. Internships
5. Community services experience through the national Writing in Schools program
6. Volunteer experience in literary magazine production

ENGLISH WRITING - BS (5120)

Concentration in Professional (PROF)

This program is effective as of Summer 2021

Revised 03.05.2021

UCC: 09.01.2020

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled

SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 102	Critical Writing	3
ESAP 101	FIRST Seminar *	1
MATH 117	Quantitative Reasoning	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Creative & Aesthetic Inquiry (p. 29)		3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ENGL 104	Critical Reading	3
ENGL 204	Composition and Rhetoric	3
ENGL 225	Introduction to Creative Writing	3
SCI 101	Science of Life	3
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
ENGL 205	Introduction to Professional Writing	3
SCI 102	Understanding the Physical World	3
Select one of the following:		3
ENGL 243	Literature of the Women's Movement	
ENGL 244	Native American Literature	
ENGL 246	U.S. Latino/a Literatures	
ENGL 298	Selected Topics	
Course in other department/minor		
Social Science Inquiry (p. 29)		3
Thematic Thread Requirement (p. 29)		3
Declare a Thematic Thread <sup>8</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ENGL 230	Introduction to Linguistics and Grammar <sup>2</sup>	3
Select one of the following:		3
ENGL 242	African-American Literature	
ENGL 248	Asian Literature <sup>3</sup>	
Thematic Thread Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3

Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
ENGL 334	Writing Community Stories	3
Select one of the following:		3
ENGL 298	Selected Topics	
ENGL 311	Chaucer and Medieval Culture	
ENGL 317	British Literature I	
ENGL 319	American Literature I	
ENGL 402	World Literature	
Select one of the following:		3
ENGL 331	Historical Development of the English Language <sup>4</sup>	
Course in other department/minor		
ENGL 365	Writing for the World Wide Web	3
Course in other department/minor		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ENGL 335	Writing for Video Games	3
Select one of the following:		3
ENGL 298	Selected Topics	
ENGL 312	Introduction to Shakespeare	
ENGL 318	British Literature II	
ENGL 320	American Literature II <sup>5</sup>	
Select one of the following:		3
ENGL 230	Introduction to Linguistics and Grammar	
ENGL 332	Modern English Grammar and Syntax <sup>6</sup>	
Course in other department/minor		
ENGL 327 or ENGL 429	Healthcare Writing or Grant and Proposal Writing	3
ENGL 330	Literary Publications & Design (every other spring)	3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
ENGL 409	Professional English	3
Select one of the following:		3
ENGL 403	Literary and Cultural Theory	
ENGL Elective <sup>7</sup>		
ENGL 450	Internship	3
Course in other department/minor		3
Course in other department/minor		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ENGL 327 or ENGL 429	Healthcare Writing or Grant and Proposal Writing	3
Select one of the following:		3
ENGL 403	Literary and Cultural Theory	
ENGL Elective Course <sup>8</sup>		
ENGL 450	Internship	3
ENGL 330	Literary Publications & Design (every other spring)	3

Course in other department/minor	3
<b>Hours</b>	<b>15</b>
<b>Total Hours**</b>	<b>121</b>

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.
- <sup>2</sup> If not taking ENGL 331 or ENGL 332
- <sup>3</sup> If not taking ENGL 243, ENGL 244, ENGL 246, or ENGL 298 in semester 3.
- <sup>4</sup> If not taking ENGL 230 or ENGL 332.
- <sup>5</sup> If not taking ENGL 298, ENGL 311, ENGL 317, ENGL 319, or ENGL 402 in semester 5
- <sup>6</sup> If not taking ENGL 331.
- <sup>7</sup> ENGL 243, ENGL 248, ENGL 298
- <sup>8</sup> ENGL 328, ENGL 410
- <sup>9</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.
- \* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 5120

Concentration Code: PROF

Revised date: 08.03.2021

## Film and Media Studies, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

### Related Links

Film and Media Studies, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/film-and-media-studies-minor/>)

Languages, Literatures, Cultures, and Writing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/languages-literatures-cultures-and-writing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.00 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required courses</b>		
ENGL 214	Introduction to Film Analysis	3

ENGL 307	Writing About Electronic Media and Film	3
ENGL 315	The Cinematic Review: Historical and Critical Writing	3

### Electives

Select three of the following, at least one at 300-level or higher:		9
ART 214	Intermediate Studio Digital Media	
ART 300	Art Seminar	
ART 314	Advanced Studio Digital Media	
ART 315	Master Studio	
ART 414	Senior Studio Digital Media	
COMM 201	Digital Imaging	
COMM 248	Interactive Multimedia 1	
COMM 254	Video Production	
COMM 258	Interactive Multimedia 2	
COMM 347	New-Media Journalism	
COMM 350	Editing for Video	
COMM 355	TV Field Production	
COMM 359	Interactive Multimedia 3	
COMM 458	Media Criticism	
ENGL 314	European Film	
ENGL 316	Asian Film	
ENGL 349	Creative Writing: Screenplay	
ENGL 498	Selected Topics	
HIST 498	Selected Topics	
POLS 333	The Political Film	
INDP 310	Cultural Area Studies	
RUSS 305	Russian Civilization via Film	
SPAN 307	U.S. Latino Cultures	
Pittsburgh Filmmakers Production or Analysis Course (with English Department Chair approval)		

**Total Hours** **18**

- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN FILM AND MEDIA STUDIES (24D)

This program is effective as of Fall 2015

Revised 8-2019

## French, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

French, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/french/>)

Languages, Literatures, Cultures, and Writing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/languages-literatures-cultures-and-writing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.00 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required French Courses</b>		
FREN 102	French Language and Culture II <sup>1</sup>	3
FREN 103	French Language and Culture III <sup>1</sup>	3
FREN 201	French Conversation I <sup>1</sup>	3
FREN 220	Reading in French <sup>1</sup>	3
Select two FREN courses at the 300/400 level <sup>1</sup>		6
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> A grade of "C" or better is required

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN FRENCH (28A)

This program is effective as of Spring 2019.

Revised 8-2019

## Global Learning and Cultural Competence - Japanese Studies, Certificate

To access Certificate Requirements, please view the Curriculum Guide tab.

## RELATED LINKS

Global Learning and Cultural Competence - Japanese Studies, Certificate Program Page (<https://www.sru.edu/academics/certificates/japanese-studies-certificate/>)

Languages, Literatures, Cultures, and Writing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/modern-languages-and-cultures/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Certificate GPA: 2.0 or higher

### CERTIFICATE REQUIREMENTS

Code	Title	Hours
<b>Required Core Courses</b>		
JAPN 101	Japanese Language and Culture I <sup>1</sup>	3
JAPN 102	Japanese Language and Culture II <sup>1</sup>	3
JAPN 103	Japanese Language and Culture III <sup>1</sup>	3
<b>Electives</b>		
Select 2 classes from the following:		6
JAPN 202	Intermediate Japanese I <sup>1</sup>	
JAPN 215	Topics in Japanese Culture	
JAPN 300	Reading & Writing Japanese	
JAPN 303	Professional Japanese	
JAPN 305	Japanese Popular Culture	
JAPN 315	Japanese Study Abroad	
JAPN 330	Samurai Culture Through Film	
ENGL 248	Asian Literature	
ENGL 316	Asian Film	
ENGL 402	World Literature (by Advisement)	
HIST 376	Modern Japan	
HIST 381	East Asian Military Traditions	
HIST 382	Modern Asian Pacific Rim	
INDP 310	Cultural Area Studies	
INDP 310	Cultural Area Studies	
INDP 360	Issues in Asia; Women in Asian Societies	
MODL 105	Introduction to Asian Civilizations	
PHIL 140	World Religions (by Advisement)	
<b>Total Hours</b>		<b>15</b>



<sup>1</sup> A grade of "C" or better is required.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

CERTIFICATE IN GLOBAL LNG & CULTURAL COMP - JAPANESE STUDIES (5GCJ)

This program is effective as of Summer 2022

Revised 07.08.2022

UCC 11.30.2021

## Global Learning and Cultural Competence - Professional Spanish, Certificate

To access Certificate Requirements, please view the Curriculum Guide tab.

## Related Links

Global Learning and Cultural Competence - Professional Spanish, Certificate Program Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/languages-literatures-cultures-and-writing/programs/>)

Languages, Literatures, Cultures, and Writing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/languages-literatures-cultures-and-writing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Certificate GPA: 2.0 or higher

### CERTIFICATE REQUIREMENTS

Code	Title	Hours
<b>Required Core Courses</b>		
SPAN 101 or SPAN 110 or SPAN 121 or SPAN 131	Spanish Language & Culture I Spanish for Educators Spanish for Health Professionals Spanish for the Business World	3
SPAN 102	Spanish Language & Culture II <sup>1</sup>	3
SPAN 103 or SPAN 104	Spanish Language & Culture III Situational Spanish	3

### Electives

Select six credits:		6
SPAN 200	Writing in Spanish for the Professions I <sup>1</sup>	
SPAN 201	Speaking in Spanish for the Professions I <sup>1</sup>	
SPAN 215	Topics in Hispanic Culture	

**Total Hours** **15**

<sup>1</sup> A grade of "D" or better is required.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

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PASSHE - Pennsylvania State System of Higher Education Institutions

CERTIFICATE IN GLOBAL LEARNING & CULTURAL COMPETENCE-PROFESSIONAL SPANISH (5GCS)

This program is effective as of Summer 2022

UCC 10.05.2021

Revised 03.31.2022

## Latin American Studies, Certificate

To access Certificate Requirements, please view the Curriculum Guide tab.

## Related Links

Latin American Studies, Certificate Program Page (<https://www.sru.edu/academics/certificates/latin-american-studies-certificate/>)

Languages, Literatures, Cultures, and Writing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/languages-literatures-cultures-and-writing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Certificate GPA: 2.0 or higher

### Certificate Requirements

- Please Note: Based on the Placement Test administered by the Department of Modern Languages and Cultures, a student may exempt any or all of the courses at the 100 and 200 levels.**

Code	Title	Hours
<b>Required Courses</b>		
Select three of the following:		15
SPAN 307	U.S. Latino Cultures <sup>1</sup>	

SPAN 326	The Civilization of Spanish America: Precolumbian to 19th Century <sup>1</sup>	
SPAN 328	Latin American Today <sup>1</sup>	
ENGL 246	U.S. Latino/a Literatures	
SPAN 332	Spanish American Literature - 19th Century to Present <sup>1</sup>	
SPAN 432	Exploring Latin American Cultures through Media <sup>1</sup>	
GES 201	Latin America and the Caribbean	
HIST 351	Latin America to 1830	
HIST 352	Latin America Since 1830	
<b>Total Hours</b>		<b>15</b>

<sup>1</sup> A grade of "C" or better is required.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

CERTIFICATE IN LATIN AMERICAN STUDIES (554L)

This program is effective as of Spring 2019

Revised 10-2019

## Literature, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Literature, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/english-language-and-literature/>)

Languages, Literatures, Cultures, and Writing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/languages-literatures-cultures-and-writing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.00 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU

- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Courses</b>		
ENGL 220	Introduction to Literary and Cultural Studies	3
ENGL 312	Introduction to Shakespeare	3
or ENGL 317	British Literature I	
or ENGL 318	British Literature II	
or ENGL 389	Stratford Shakespeare Tour	
ENGL 319	American Literature I	3
or ENGL 320	American Literature II	
Select two of the following:		6
ENGL 238	Video Games as Literature	
ENGL 242	African-American Literature	
ENGL 243	Literature of the Women's Movement	
ENGL 244	Native American Literature	
ENGL 246	U.S. Latino/a Literatures	
ENGL 248	Asian Literature	
ENGL 298	Selected Topics	
ENGL 300	Queer Literature and Film	
ENGL 311	Chaucer and Medieval Culture	
ENGL 328	Young Adult Literature	
ENGL 402	World Literature	
ENGL 403	Literary and Cultural Theory	
ENGL 410	Literature of the Environment	
<b>English Electives</b>		
Select one ENGL course <sup>1</sup>		3
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> Excluding ENGL 102

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN LITERATURE (24A)

This program is effective as of Fall 2022

Revised 02.21.2022

UCC 09.21.2021

## Middle Eastern Studies, Certificate

To access Certificate Requirements, please view the Curriculum Guide tab.

### Related Links

Middle Eastern Studies, Certificate Program Page (<https://www.sru.edu/academics/certificates/middle-eastern-studies-certificate/>)

Languages, Literatures, Cultures, and Writing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/languages-literatures-cultures-and-writing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Certificate GPA: 2.0 or higher

### Certificate Requirements

Code	Title	Hours
<b>Required Core Courses</b>		
ARAB 101	Arabic Language and Culture I <sup>1</sup>	3
ARAB 102	Arabic Language and Culture II <sup>1</sup>	3
ARAB 103	Arabic Language and Culture III <sup>1</sup>	3
ARAB 215	Topics in Arabic Culture <sup>1</sup>	3
Subtotal		12
<b>Electives</b>		
Select three credits the following:		3
ARAB 202	Intermediate Arabic I <sup>1</sup>	
ARAB 315	Arabic Study Abroad	
CRIM 328	Transnational Crime & Justice	
CRIM 380	Women & the Criminal Justice System	
HIST 370	History and the Bible	
HIST 371	History of Jews	
HIST 380	Egyptology	
HIST 462	The Contemporary Middle East	
HIST 463	Israel-History, State and Society	
HSS 441	Terrorism, Law and National Security	
INDP 310	Cultural Area Studies	
PHIL 140	World Religions	
POLS 103	International Relations	
POLS 220	Foreign Policy	
POLS 263	Introduction to Comparative Politics	
POLS 350	Transnational Terrorism	
POLS 369	Politics of Developing Areas	
<b>Total Hours</b>		<b>15</b>

<sup>1</sup> A grade of "C" or better is required.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

CERTIFICATE IN MIDDLE EASTERN STUDIES (5MES)

This program is effective as of Fall 2020

UCC 03.05.20

Revised 08.17.20

## Modern Languages and Cultures, Bachelor of Arts (BA) - Concentration in Cultural Area Studies

### Program Learning Outcomes

- **Communication:** Communicate in other language than English
  - Standard 1.1: Students engage in conversations, provide and obtain information, express feelings and emotions, and exchange opinions.
  - Standard 1.2: Students understand and interpret written and spoken language on a variety of topics.
  - Standard 1.3: Students present information, concepts, and ideas to an audience of listeners or readers on a variety of topics.
- **Communities:** Participate in multilingual communities at home & around the world
  - Standard 5.1: Students use the language both within and beyond the school setting.
  - Standard 5.2: Students show evidence of becoming life-long learners by using the language for personal enjoyment and enrichment.
- **Comparisons:** Develop insight into the nature of language and culture
  - Standard 4.1: Students demonstrate understanding of the nature of language through comparisons of the language studied and their own.
  - Standard 4.2: Students demonstrate understanding of the concept of culture through comparisons of the cultures studied and their own.
- **Connections:** Connect with other disciplines and acquire information
  - Standard 3.1: Students reinforce and further their knowledge of other disciplines through the foreign language.
  - Standard 3.2: Students acquire information and recognize the distinctive viewpoints that are only available through the foreign language and its cultures.
- **Cultures:** Gain knowledge and understanding of other cultures
  - Standard 2.1: Students demonstrate an understanding of the relationship between the practices and perspectives of the culture studied.

- Standard 2.2: Students demonstrate an understanding of the relationship between the products and perspectives of the culture studied.

Related Links

Modern Languages and Cultures - Cultural Area Studies, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/cultural-area-studies/>)

Languages, Literatures, Cultures, and Writing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/languages-literatures-cultures-and-writing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

Curriculum Guide

GPA Requirement

Major GPA: 2.0 or higher  
Overall GPA: 2.0 or higher

Summary\*

Code	Title	Hours
Rock Studies 2 Requirements		42
Modern Language Requirement		0-9
Other Basic Requirements		0-3
Computer Competency		0-3
Major/Concentration Requirements		36
Electives		42

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		

SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
Total Hours		42

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.
- <sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
Complete 0-9 credits		0-9
Total Hours		0-9

Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
Total Hours		0-3

Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
Total Hours		0-3

DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

Major/Concentration Requirements

- 17 major credits must be taken at SRU or PASSHE
- 17 major credits must be taken at the 300 level or above (Adviser approved courses)

- Courses used in this major may not be used to satisfy Rock Studies 2, a minor, or another major's requirements.
- A student must have earned 30 credits and a 2.0 GPA to enter the program.
- AP, Credit by Exam, CLEP, and institutional credit by exam may count towards the degree to a maximum of 45 credits. Pass/Fail and non-credit courses will not be counted in the major.

Code	Title	Hours
<b>Oral and Written Communication</b>		
Select two of the following:		6
COMM 217	Intercultural Communication <sup>1</sup>	
GES 105	World Regional Geography <sup>1</sup>	
POLS 103	International Relations <sup>1</sup>	
<b>Analytical, Quantitative &amp; Critical Thinking Skills</b>		
Select one of the following courses approved for your cultural area:		3
HIST 151	Ancient World to the Age of Global Encounters <sup>1</sup>	
HIST 152	Early Modern to Contemporary World <sup>1</sup>	
INDP 106	Race and Ethnic Diversity in the USA <sup>1</sup>	
INDP 310	Cultural Area Studies <sup>1</sup>	
INDP 322	Archaeology of the Americas <sup>1</sup>	
MODL 105	Introduction to Asian Civilizations <sup>1</sup>	
Select one of the following:		3
INDP 317	Statistics for the Social Sciences <sup>1</sup>	
INDP 318	Research Methods in Interdisciplinary Studies <sup>1</sup>	
Subtotal		12
<b>Emphasis Area</b>		
Courses selected by advisement		
<i>Part I: Primary Cultural Area –America, Asia, Europe, Latin America or Middle East</i>		
Select five courses in the following categories: Foundations, Culture and Society, History, Current Issues		15
<i>Part II: Electives</i>		
Select three electives		9
Subtotal		24
<b>Total Hours</b>		<b>36</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Experiential Learning Experience

Must complete 40 hours of experiential learning activities which are approved by the Academic Adviser. Please consult with your Adviser for details of the options available.

Code	Title	Hours
	Experiential Learning Activities	40

## Co-curricular and Experiential Learning

The department of Modern Languages encourages students to engage in the following areas to deepen their educational experience:

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership development
5. Service-learning classes
6. Career education and development
7. Internships
8. Field Experiences
9. Volunteering (schools, world language competition, language clubs, communities)

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MODERN LANGUAGES AND CULTURES - BA (5 45)

Concentration in Cultural Area Studies (CAST)

This program is effective as of Fall 2019

Revised 05.26.2022

UCC RISP 2019

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
Modern Language Requirement I		3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>4</sup>	3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Modern Language Requirement II		3
ENGL 104	Critical Reading	3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
COMM 217	Intercultural Communication <sup>1</sup>	3
HIST 151	Ancient World to the Age of Global Encounters <sup>2</sup>	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	



POLS 235	Civil Discourse and Democracy	
Modern Language Requirement III		3
ENGL 104	Critical Reading	3
Declare a Thematic Thread <sup>3</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
COMM 217	Intercultural Communication <sup>1</sup>	3
HIST 151	Ancient World to the Age of Global Encounters <sup>2</sup>	3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
Major Emphasis Area Course		3
Major Emphasis Area Course		3
Major Emphasis Area Course		3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
INDP 317 or INDP 318	Statistics for the Social Sciences or Research Methods in Interdisciplinary Studies	3
Major Emphasis Area Course		3
Major Emphasis Area Course		3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
Major Emphasis Area Course		3
Major Emphasis Area Course		3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Major Emphasis Area Course		3
Major Emphasis Area Course		3
Elective		3
Elective		3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>121</b>

<sup>1</sup> And/or GES 105 (F), World Regional Geography, and/or POLS 103 (F), International Relation.

<sup>2</sup> And/or HIST 152, Rise of the Modern World (European) and/or INDP 106, Race and Ethnic Diversity (Asian Studies) and/or INDP 310, Cultural Area Studies-Middle East and/or INDP 322 Archeology of the Americas (Latin Am) and/or MODL 105, Intro to Asian Civilizations (Asian Studies).

<sup>3</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>4</sup> Course offered in multiple subjects; cannot take course in first major subject.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 5 45

Concentration Code: CAST

Revised: 05.26.2022

## Modern Languages and Cultures, Bachelor of Arts (BA) - Concentration in French

### Program Learning Outcomes

- **Communication:** Communicate in other language than English
  - Standard 1.1: Students engage in conversations, provide and obtain information, express feelings and emotions, and exchange opinions.
  - Standard 1.2: Students understand and interpret written and spoken language on a variety of topics.
  - Standard 1.3: Students present information, concepts, and ideas to an audience of listeners or readers on a variety of topics.
- **Communities:** Participate in multilingual communities at home & around the world
  - Standard 5.1: Students use the language both within and beyond the school setting.
  - Standard 5.2: Students show evidence of becoming life-long learners by using the language for personal enjoyment and enrichment.
- **Comparisons:** Develop insight into the nature of language and culture
  - Standard 4.1: Students demonstrate understanding of the nature of language through comparisons of the language studied and their own.
  - Standard 4.2: Students demonstrate understanding of the concept of culture through comparisons of the cultures studied and their own.
- **Connections:** Connect with other disciplines and acquire information
  - Standard 3.1: Students reinforce and further their knowledge of other disciplines through the foreign language.
  - Standard 3.2: Students acquire information and recognize the distinctive viewpoints that are only available through the foreign language and its cultures.
- **Cultures:** Gain knowledge and understanding of other cultures

- Standard 2.1: Students demonstrate an understanding of the relationship between the practices and perspectives of the culture studied.
- Standard 2.2: Students demonstrate an understanding of the relationship between the products and perspectives of the culture studied.

## Related Links

Modern Languages and Cultures - French, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/french/>)

Languages, Literatures, Cultures, and Writing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/languages-literatures-cultures-and-writing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Modern Language Requirement	0-9
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	30
	Electives	48

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

#### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		

SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
Complete 0-9 credits		0-9
<b>Total Hours</b>		<b>0-9</b>

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- 15 major credits must be taken at SRU or PASSHE
- 15 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Basic Skill Courses</b>		
Exemption from the basic skills courses may be possible based on a placement exam given by the Modern Languages Department. Both English and Native French speakers should consult the Modern Languages and Cultures Department for information.		
FREN 103	French Language and Culture III <sup>1,2</sup>	3
FREN 201	French Conversation 1 <sup>1,2</sup>	3
FREN 220	Reading in French <sup>1,2</sup>	3
Subtotal		9
<b>Required French Courses</b>		
FREN 300	French Grammar and Composition 1 <sup>1,2</sup>	3
FREN 330	French Literature from the 18th Century to the Present <sup>1,2</sup>	3
FREN 350	French Linguistics and Phonetics <sup>1,2</sup>	3
FREN 400	French Grammar and Composition 2 <sup>1,2</sup>	3
Subtotal		12
<b>Required Literature Course</b>		
Select one of the following:		3
FREN 404	Exploring French Culture through Media <sup>1,2</sup>	
FREN 430	French Literature 12th to 17th Century <sup>1,2</sup>	
<b>Required Civilization Course</b>		
Select one of the following:		3
FREN 305	France through the Ages <sup>1,2</sup>	
FREN 306	France and Francophone Identities Today <sup>1,2</sup>	
<b>Required Conversation Course</b>		
Select one of the following:		3
FREN 301	French Conversation 2 <sup>1,2</sup>	
FREN 401	French Conversation 3 <sup>1,2</sup>	
<b>Electives at the 300 level and above</b>		
If any of the basic skill courses are waived, choose as many electives as necessary to reach a total of 30 credits in the major.		0-9
<b>Required Capstone Project</b>		
See Advisor for specific information related to requirements		
<b>Study Abroad</b>		
Study Abroad is highly recommended. Please see advisor for information.		
<b>Total Hours</b>		<b>30</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA.

<sup>2</sup> A grade of "C" or better is required.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

The department of Modern Languages encourages students to engage in the following areas to deepen their educational experience:

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership development
5. Service-learning classes
6. Career education and development
7. Internships
8. Field Experiences
9. Volunteering (schools, world language competition, language clubs, communities)

## MODERN LANGUAGES AND CULTURES - BA (5 45)

### Concentration in French (FREN)

This program is effective as of Fall 2019

Revised 02.2020

UCC RISP 2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
FREN 101	French Language and Culture I	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
SUBJ 139	Foundations of Academic Discovery <sup>2</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
FREN 102	French Language and Culture II	3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
FREN 103	French Language and Culture III	3
ENGL 104	Critical Reading	3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3

Declare a Thematic Thread<sup>1</sup>

Hours		15
<b>Spring</b>		
FREN 220	Reading in French	3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
Elective		3
Elective		3
Hours		15
<b>Third Year</b>		
<b>Fall</b>		
FREN 201	French Conversation 1	3
Elective		3
Elective		3
Elective		3
Elective		3
Hours		15
<b>Spring</b>		
FREN 300	French Grammar and Composition 1	3
FREN 301 or FREN 401	French Conversation 2 or French Conversation 3	3
Elective		3
Elective		3
Elective		3
Hours		15
<b>Fourth Year</b>		
<b>Fall</b>		
FREN 400	French Grammar and Composition 2	3
FREN 305 or FREN 306	France through the Ages or France and Francophone Identities Today	3
Elective		3
Elective		3
Elective		3
Hours		15
<b>Spring</b>		
FREN 330	French Literature from the 18th Century to the Present	3
FREN 350	French Linguistics and Phonetics	3
FREN 404 or FREN 430	Exploring French Culture through Media or French Literature 12th to 17th Century	3
Elective		3
Elective		3
Hours		15
<b>Total Hours**</b>		<b>121</b>

courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 5 45  
Concentration Code: FREN  
Revised: 11-2019

## Modern Languages and Cultures, Bachelor of Arts (BA) - Concentration in Professional French

### Program Learning Outcomes

- **Communication:** Communicate in other language than English
  - Standard 1.1: Students engage in conversations, provide and obtain information, express feelings and emotions, and exchange opinions.
  - Standard 1.2: Students understand and interpret written and spoken language on a variety of topics.
  - Standard 1.3: Students present information, concepts, and ideas to an audience of listeners or readers on a variety of topics.
- **Communities:** Participate in multilingual communities at home & around the world
  - Standard 5.1: Students use the language both within and beyond the school setting.
  - Standard 5.2: Students show evidence of becoming life-long learners by using the language for personal enjoyment and enrichment.
- **Comparisons:** Develop insight into the nature of language and culture
  - Standard 4.1: Students demonstrate understanding of the nature of language through comparisons of the language studied and their own.
  - Standard 4.2: Students demonstrate understanding of the concept of culture through comparisons of the cultures studied and their own.
- **Connections:** Connect with other disciplines and acquire information
  - Standard 3.1: Students reinforce and further their knowledge of other disciplines through the foreign language.
  - Standard 3.2: Students acquire information and recognize the distinctive viewpoints that are only available through the foreign language and its cultures.
- **Cultures:** Gain knowledge and understanding of other cultures
  - Standard 2.1: Students demonstrate an understanding of the relationship between the practices and perspectives of the culture studied.
  - Standard 2.2: Students demonstrate an understanding of the relationship between the products and perspectives of the culture studied.

## Related Links

Modern Languages and Cultures - Professional French, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/professional-french-modern-languages-and-cultures/>)

<sup>1</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>2</sup> Course offered in multiple subjects; cannot take course in first major subject.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing

Languages, Literatures, Cultures, and Writing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/languages-literatures-cultures-and-writing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

Curriculum Guide

GPA Requirement

Major GPA: 2.0 or higher  
Overall GPA: 2.0 or higher

Summary\*

Code	Title	Hours
Rock Studies 2 Requirements		42
Modern Language Requirement		0-9
Other Basic Requirements		0-3
Computer Competency		0-3
Major/Concentration Requirements		30
Electives		48

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies 2 Requirements

Code	Title	Hours
The Rock		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15

Thematic Thread

Select 12 Credits (p. 29) <sup>2</sup>		12
Total Hours		42

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
Complete 0-9 credits		0-9
Total Hours		0-9

Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
Total Hours		0-3

Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
Total Hours		0-3

DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

Major/Concentration Requirements

- 15 major credits must be taken at SRU or PASSHE
- 15 major credits must be taken at the 300 level or above

Code	Title	Hours
Basic Skill Courses		
Exemption from the basic skills courses may be possible based on a placement exam given by the Modern Languages Department. Both English and Native French speakers should consult the Modern Languages and Cultures Department for information. CLEP, AP, and OPI credits are accepted for some of the following courses.		



FREN 102	French Language and Culture II <sup>1,2</sup>	3
FREN 103	French Language and Culture III <sup>1,2</sup>	3
FREN 201	French Conversation 1 <sup>1,2</sup>	3
FREN 220	Reading in French <sup>1,2</sup>	3
Subtotal		12
<b>Required French Courses</b>		
FREN 300	French Grammar and Composition 1 <sup>1,2</sup>	3
FREN 301 or FREN 401	French Conversation 2 <sup>1,2</sup> French Conversation 3	3
FREN 303	Professional French <sup>1,2</sup>	3
Select one of the following:		3
FREN 305	France through the Ages <sup>1,2</sup>	
FREN 306	France and Francophone Identities Today <sup>1,2</sup>	
FREN 350	French Linguistics and Phonetics <sup>1,2</sup>	3
FREN 400	French Grammar and Composition 2 <sup>1,2</sup>	3
Subtotal		18
<b>French Electives – 300 level and above</b>		
For students who exempt from Basic Skills. (Choose as many electives as necessary to reach 30 credits).		0-12
<b>Total Hours</b>		<b>30</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> A grade of "C" or better is required.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Additional Requirements

Code	Title	Hours
<b>Course and Explanation</b>		
<i>Major, Minor or Certificate</i>		
Student must complete a Minor or Major or Certificate in any other discipline:		
Completed a Minor in a Selected Field of Study or a Major or Certificate in any other discipline		
<i>Non Credit Requirement</i>		
Student must select one of the following:		
Students' research must be conducted in their minor area or second major and the final product will be a written paper and an oral presentation using the French language.		
Students can choose from three (3) options to complete the Capstone Experience requirement: Internship Presentation, Study Abroad Presentation or Research Presentation, depending on their area of interest.		
The Internship Experience must be approved by the Modern Language and Cultures chair and the student's advisor in Modern Languages.		

## Co-curricular and Experiential Learning

The department of Modern Languages encourages students to engage in the following areas to deepen their educational experience:

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research

4. Student leadership development
5. Service-learning classes
6. Career education and development
7. Internships
8. Field Experiences
9. Volunteering (schools, world language competition, language clubs, communities)

### MODERN LANGUAGES AND CULTURES - BA (5 45)

Concentration in Professional French (FRPR)

This program is effective as of Fall 2019

Revised 7-2019

UCC RISP 2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
FREN 101	French Language and Culture I	3
ENGL 102	Critical Writing	3
ESAP 101	FIRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>2</sup>	3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
FREN 102	French Language and Culture II	3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
FREN 103	French Language and Culture III	3
ENGL 104	Critical Reading	3
Rock Studies 2 Requirement (p. 29)		3
Elective		3
Elective		3
Declare a Thematic Thread <sup>1</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
FREN 220	Reading in French	3

Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
FREN 201	French Conversation 1	3
Minor		3
Minor		3
Rock Studies 2 Requirement (p. 29)		3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
FREN 300	French Grammar and Composition 1	3
FREN 301	French Conversation 2	3
Minor		3
Minor		3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
FREN 303	Professional French	3
FREN 305 or FREN 306	France through the Ages or France and Francophone Identities Today	3
FREN 400	French Grammar and Composition 2	3
Minor		3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
FREN 350	French Linguistics and Phonetics	3
Minor		3
Minor		3
Elective		3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>121</b>

<sup>1</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>2</sup> Course offered in multiple subjects; cannot take course in first major subject..

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 5 45

Concentration Code: FRPR

Revised: 11-2019

## Modern Languages and Cultures, Bachelor of Arts (BA) - Concentration in Spanish

### Program Learning Outcomes

- **Communication:** Communicate in other language than English
  - Standard 1.1: Students engage in conversations, provide and obtain information, express feelings and emotions, and exchange opinions.
  - Standard 1.2: Students understand and interpret written and spoken language on a variety of topics.
  - Standard 1.3: Students present information, concepts, and ideas to an audience of listeners or readers on a variety of topics.
- **Communities:** Participate in multilingual communities at home & around the world
  - Standard 5.1: Students use the language both within and beyond the school setting.
  - Standard 5.2: Students show evidence of becoming life-long learners by using the language for personal enjoyment and enrichment.
- **Comparisons:** Develop insight into the nature of language and culture
  - Standard 4.1: Students demonstrate understanding of the nature of language through comparisons of the language studied and their own.
  - Standard 4.2: Students demonstrate understanding of the concept of culture through comparisons of the cultures studied and their own.
- **Connections:** Connect with other disciplines and acquire information
  - Standard 3.1: Students reinforce and further their knowledge of other disciplines through the foreign language.
  - Standard 3.2: Students acquire information and recognize the distinctive viewpoints that are only available through the foreign language and its cultures.
- **Cultures:** Gain knowledge and understanding of other cultures
  - Standard 2.1: Students demonstrate an understanding of the relationship between the practices and perspectives of the culture studied.
  - Standard 2.2: Students demonstrate an understanding of the relationship between the products and perspectives of the culture studied.

### Related Links

Modern Languages and Cultures - Spanish, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/spanish/>)

Languages, Literatures, Cultures, and Writing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/languages-literatures-cultures-and-writing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

### Curriculum Guide

#### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

## Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Modern Language Requirement	0-9
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	30
	Electives	48

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
Complete 0-9 credits		0-9
<b>Total Hours</b>		<b>0-9</b>

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- 15 major credits must be taken at SRU or PASSHE
- 15 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Basic Skill Courses</b>		
Exemption from the basic skills courses may be possible based on the placement exam given by Modern Languages. CLEP, AP and OPI credits are accepted for some of the following courses.		
SPAN 103	Spanish Language & Culture III <sup>4</sup>	3
or SPAN 104	Situational Spanish	
SPAN 200	Writing in Spanish for the Professions I <sup>1,2</sup>	3
SPAN 201	Speaking in Spanish for the Professions I <sup>1,2</sup>	3
SPAN 220	Understanding Hispanic Cultures Through Reading <sup>1,2</sup>	3
Subtotal		12
<b>Required Spanish Grammar Courses</b>		
SPAN 300	Writing in Spanish for the Professions II <sup>1,2</sup>	3
SPAN 301	Speaking in Spanish for the Professions II <sup>1,2</sup>	3
SPAN 400	Writing in Spanish for the Professions III <sup>1,2</sup>	3

SPAN 401	Speaking in Spanish for the Professions III <sup>1,2</sup>	3
Subtotal		12
<b>Required Spanish Civilization Course</b>		
Select one of the following:		3
SPAN 305	Spain Today <sup>1,2</sup>	
SPAN 307	U.S. Latino Cultures <sup>1,2</sup>	
SPAN 326	The Civilization of Spanish America: Precolumbian to 19th Century <sup>1,2</sup>	
SPAN 328	Latin American Today <sup>1,2</sup>	
Subtotal		3
<b>Required Spanish Literature Course (300 &amp; 400 Level)</b>		
Select three credits from the following:		3
SPAN 330	Spanish Literature 1800 to Present <sup>1,2</sup>	
SPAN 332	Spanish American Literature - 19th Century to Present	
SPAN 431	Exploring Spanish Culture through Media <sup>1,2</sup>	
SPAN 432	Exploring Latin American Cultures through Media	
Subtotal		3
<b>Electives at the 300 level and above</b>		
Select zero to nine credits of SPAN electives at 300 level and above <sup>1,2,3</sup>		0-9
<b>Required Capstone Project</b>		
See Advisor for specific information related to requirements		
<b>Study Abroad - Optional</b>		
See Advisor for details		
<b>Total Hours</b>		<b>30</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA.

<sup>2</sup> A grade of "C" or better is required.

<sup>3</sup> Except SPAN 302, SPAN 309 or SPAN 335.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

<sup>4</sup> Criminology and Homeland Security majors may take SPAN 104 in place of SPAN 103

## Co-curricular and Experiential Learning

The department of Modern Languages encourages students to engage in the following areas to deepen their educational experience:

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership development
5. Service-learning classes
6. Career education and development
7. Internships
8. Field Experiences
9. Volunteering (schools, world language competition, language clubs, communities)

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MODERN LANGUAGES AND CULTURES - BA (5 45)

Concentration in Spanish (SPAN)

This program is effective as of Fall 2020

Revised 10.06.20

UCC 09.15.20

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
SPAN 101	Spanish Language & Culture I	3
Rock Studies 2 Requirement (p. 29)		3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>2</sup>	3
Rock Studies 2 Requirement (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
SPAN 102	Spanish Language & Culture II	3
ENGL 104	Critical Reading	3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
SPAN 103 or SPAN 104	Spanish Language & Culture III or Situational Spanish	3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
Declare a Thematic Thread <sup>1</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
SPAN 201	Speaking in Spanish for the Professions I	3
SPAN 220	Understanding Hispanic Cultures Through Reading	3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>

**Third Year****Fall**

SPAN 200	Writing in Spanish for the Professions I	3
SPAN 301	Speaking in Spanish for the Professions II	3
Elective		3
Elective		3
Elective		3
Elective		3
<b>Hours</b>		<b>18</b>

**Spring**

SPAN 300	Writing in Spanish for the Professions II	3
SPAN 305 or SPAN 328	Spain Today or Latin American Today	3
Elective		3
Elective		3
Elective		3
<b>Hours</b>		<b>15</b>

**Fourth Year****Fall**

SPAN 400	Writing in Spanish for the Professions III	3
Elective		3
Elective		3
Elective		3
Elective		3
<b>Hours</b>		<b>15</b>

**Spring**

SPAN 401	Speaking in Spanish for the Professions III	3
SPAN 431 or SPAN 432	Exploring Spanish Culture through Media or Exploring Latin American Cultures through Media	3
Elective		3
Elective		3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>124</b>

<sup>1</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>2</sup> Course offered in multiple subjects; cannot take course in first major subject.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 5 45

Concentration Code: SPAN

Revised: 10.06.20

## Modern Languages and Cultures, Bachelor of Arts (BA) - Concentration in Professional Spanish

### Program Learning Outcomes

- **Communication:** Communicate in other language than English
  - Standard 1.1: Students engage in conversations, provide and obtain information, express feelings and emotions, and exchange opinions.
  - Standard 1.2: Students understand and interpret written and spoken language on a variety of topics.
  - Standard 1.3: Students present information, concepts, and ideas to an audience of listeners or readers on a variety of topics.
- **Communities:** Participate in multilingual communities at home & around the world
  - Standard 5.1: Students use the language both within and beyond the school setting.
  - Standard 5.2: Students show evidence of becoming life-long learners by using the language for personal enjoyment and enrichment.
- **Comparisons:** Develop insight into the nature of language and culture
  - Standard 4.1: Students demonstrate understanding of the nature of language through comparisons of the language studied and their own.
  - Standard 4.2: Students demonstrate understanding of the concept of culture through comparisons of the cultures studied and their own.
- **Connections:** Connect with other disciplines and acquire information
  - Standard 3.1: Students reinforce and further their knowledge of other disciplines through the foreign language.
  - Standard 3.2: Students acquire information and recognize the distinctive viewpoints that are only available through the foreign language and its cultures.
- **Cultures:** Gain knowledge and understanding of other cultures
  - Standard 2.1: Students demonstrate an understanding of the relationship between the practices and perspectives of the culture studied.
  - Standard 2.2: Students demonstrate an understanding of the relationship between the products and perspectives of the culture studied.

### Related Links

Modern Languages and Cultures - Professional Spanish, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/professional-spanish/>)

Languages, Literatures, Cultures, and Writing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/languages-literatures-cultures-and-writing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

### Curriculum Guide

#### GPA Requirement

Major GPA: 2.0 or higher



Overall GPA: 2.0 or higher

Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Modern Language Requirement	0-9
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	30
	Electives	48

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies 2 Requirements

Code	Title	Hours
The Rock		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
Integrated Inquiry		
Creative and Aesthetic Inquiry		
Select 3 Credits (p. 29)		3
Humanities Inquiry		
Select 3 Credits (p. 29)		3
Social Science Inquiry		
Select 3 Credits (p. 29)		3
Natural Sciences Inquiry		
SCI 101	Science of Life	3
Physical Sciences Inquiry		
SCI 102	Understanding the Physical World	3
Subtotal		15
Thematic Thread		
Select 12 Credits (p. 29) <sup>2</sup>		12
Total Hours		42

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
Complete 0-9 credits		0-9
Total Hours		0-9

Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
Total Hours		0-3

Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
Total Hours		0-3

DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

Major/Concentration Requirements

- 15 major credits must be taken at SRU or PASSHE
- 15 major credits must be taken at the 300 level or above

Code	Title	Hours
Basic Skill Courses or 300/400 Spanish Electives		
Exemption from the basic skills courses may be possible based on a placement exam given by the Modern Languages Department. CLEP, AP and OPI credits are accepted for some of the following courses.		
SPAN 103 or SPAN 104	Spanish Language & Culture III <sup>1,2,4</sup> Situational Spanish	3
SPAN 200	Writing in Spanish for the Professions I <sup>1,2</sup>	3
SPAN 201	Speaking in Spanish for the Professions I <sup>1,2</sup>	3
SPAN 220	Understanding Hispanic Cultures Through Reading <sup>1,2</sup>	3
Subtotal		12
Required Spanish Courses		
SPAN 300	Writing in Spanish for the Professions II <sup>1,2</sup>	3
SPAN 301	Speaking in Spanish for the Professions II <sup>1,2</sup>	3

SPAN 303	Developing Communicative and Cultural Competence for the Workplace <sup>1,2</sup>	3
SPAN 400	Writing in Spanish for the Professions III <sup>1,2</sup>	3
SPAN 401	Speaking in Spanish for the Professions III <sup>1,2</sup>	3
Subtotal		15

**Literature and Culture Courses**

Select one of the following:		3
SPAN 302	Communication in Spanish for the Elementary Classroom <sup>1,2</sup>	
SPAN 305	Spain Today <sup>1,2</sup>	
SPAN 307	U.S. Latino Cultures <sup>1,2</sup>	
SPAN 309	Hispanic Civilization for the K-12 Classroom <sup>1,2</sup>	
SPAN 318	Hispanic Children's Literature for the K-12 Classroom <sup>1,2</sup>	
SPAN 326	The Civilization of Spanish America: Precolumbian to 19th Century <sup>1,2</sup>	
SPAN 328	Latin American Today <sup>1,2</sup>	
SPAN 330	Spanish Literature 1800 to Present <sup>2</sup>	
SPAN 332	Spanish American Literature - 19th Century to Present <sup>2</sup>	
SPAN 350	The Sounds of Spanish <sup>2</sup>	
SPAN 431	Exploring Spanish Culture through Media <sup>2</sup>	
SPAN 432	Exploring Latin American Cultures through Media <sup>2</sup>	

**Electives at the 300 level and above**

Select zero to nine credits: <sup>1,2,3</sup>	0-9
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<b>Total Hours</b>	<b>30</b>
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- <sup>1</sup> Course counts for 50% of Major requirements and Major GPA
- <sup>2</sup> A grade of "C" or better is required.
- <sup>3</sup> Except SPAN 302, SPAN 309 or SPAN 335
- <sup>4</sup> Criminology and Homeland Security majors may take SPAN 104 in place of SPAN 103
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**Additional Requirements**

Code	Title	Hours
<b>Course and Explanation</b>		
<i>Major, Minor or Certificate</i>		
Student must complete a Minor or Major or Certificate in any other discipline:		
Completed a Minor in a Selected Field of Study or a Major or Certificate in any other discipline		
<i>Non Credit Requirement</i>		
Student must select one of the following:		
Students' research must be conducted in their minor area or second major and the final product will be a written paper and an oral presentation using the French language.		

Students can choose from three (3) options to complete the Capstone Experience requirement: Internship Presentation, Study Abroad Presentation or Research Presentation, depending on their area of interest.

The Internship Experience must be approved by the Modern Language and Cultures chair and the student's advisor in Modern Languages.

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The department of Modern Languages encourages students to engage in the following areas to deepen their educational experience:

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9. Volunteering (schools, world language competition, language clubs, communities)

**Important Curriculum Guide Notes**

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PASSHE - Pennsylvania State System of Higher Education Institutions

MODERN LANGUAGES AND CULTURES - BA (5 45)

Concentration in Professional Spanish (SPPR)

This program is effective as of Fall 2020

Revised 10.06.20

UCC 09.15.20

**Recommended Four-Year Plan**

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
SPAN 101	Spanish Language & Culture I	3
ENGL 102	Critical Writing	3
ESAP 101	FIRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>2</sup>	3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
SPAN 102	Spanish Language & Culture II	3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3

Rock Studies 2 Requirement (p. 29)	3
Rock Studies 2 Requirement (p. 29)	3
<b>Hours</b>	<b>15</b>

**Second Year****Fall**

SPAN 103 or SPAN 104	Spanish Language & Culture III or Situational Spanish	3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
Declare a Thematic Thread <sup>1</sup>		
<b>Hours</b>		<b>12</b>

**Spring**

SPAN 201	Speaking in Spanish for the Professions I	3
SPAN 220	Understanding Hispanic Cultures Through Reading	3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
Elective		3
<b>Hours</b>		<b>15</b>

**Third Year****Fall**

SPAN 200	Writing in Spanish for the Professions I	3
SPAN 301	Speaking in Spanish for the Professions II	3
Elective		3
Minor		3
Minor		3
<b>Hours</b>		<b>15</b>

**Spring**

SPAN 300	Writing in Spanish for the Professions II	3
Select one of the following:		3
SPAN 305	Spain Today	
SPAN 328	Latin American Today	
SPAN 431	Exploring Spanish Culture through Media	
SPAN 432	Exploring Latin American Cultures through Media	
Minor		3
Minor		3
Elective		3
<b>Hours</b>		<b>15</b>

**Fourth Year****Fall**

SPAN 400	Writing in Spanish for the Professions III	3
Minor		3
Minor		3
Elective		3
Elective		3
<b>Hours</b>		<b>15</b>

**Spring**

SPAN 303	Developing Communicative and Cultural Competence for the Workplace	3
SPAN 401	Speaking in Spanish for the Professions III	3
Elective		3

Elective	3
Elective	3
<b>Hours</b>	<b>15</b>
<b>Total Hours**</b>	<b>118</b>

<sup>1</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>2</sup> Course offered in multiple subjects; cannot take course in first major subject.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 5 45

Concentration Code: SPPR

Revised: 10.06.20

## Professional French, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Professional French, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/professional-french-modern-languages-and-cultures/>)

Languages, Literatures, Cultures, and Writing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/languages-literatures-cultures-and-writing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.00 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor at SRU
- A minimum of 6 credit hours must be upper division at the 300/400 level.
- A minor shall be no fewer than 18 credits.
- No minimum number of credits from outside the student's major.
- Minimum 2.0 CGPA

Code	Title	Hours
<b>Required French Courses</b>		
FREN 102	French Language and Culture II <sup>1</sup>	3
FREN 103	French Language and Culture III <sup>1</sup>	3
FREN 201	French Conversation I <sup>1</sup>	3
FREN 220	Reading in French <sup>1</sup>	3
FREN 303	Professional French <sup>1</sup>	3
Select one (or more) of the following to reach 18 credits:		3

FREN 300	French Grammar and Composition <sup>1</sup>	
FREN 301	French Conversation 2 <sup>1</sup>	
FREN 350	French Linguistics and Phonetics <sup>1</sup>	
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> A grade of "C" or better is required.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Minor in Professional French (28B)  
This program is effective Spring 2019  
Revised 04.09.2020

## Professional Japanese, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

### Related Links

Professional Japanese, Minor Program Page ([https://www.sru.edu/academics/majors-and-minors/professional-japanese-\(minor\)/](https://www.sru.edu/academics/majors-and-minors/professional-japanese-(minor)/))

Languages, Literatures, Cultures, and Writing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/languages-literatures-cultures-and-writing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (300/ 400 level)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Japanese Courses</b>		
JAPN 101	Japanese Language and Culture I <sup>1</sup>	3
JAPN 102	Japanese Language and Culture II <sup>1</sup>	3
JAPN 103	Japanese Language and Culture III <sup>1</sup>	3
JAPN 202	Intermediate Japanese I <sup>1</sup>	3
JAPN 303	Professional Japanese <sup>1</sup>	3

Select one (or more) of the following to reach 18 JAPN credits:		3
JAPN 300	Reading & Writing Japanese <sup>1</sup>	
JAPN 315	Japanese Study Abroad <sup>1</sup>	
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> A grade of "C" or better is required.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

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PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN PROFESSIONAL JAPANESE (49A)  
This program is effective Spring 2019  
Revised 04.09.2020

## Professional Spanish, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

### Related Links

Professional Spanish, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/professional-spanish/>)

Languages, Literatures, Cultures, and Writing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/languages-literatures-cultures-and-writing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.00 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits
- **Please Note: Based on the Placement Test administered by the Department of Modern Languages & Cultures, a student may exempt any or all of the courses at the 100 and 200 levels.**

Code	Title	Hours
<b>Required Spanish Courses</b>		
SPAN 103	Spanish Language & Culture III <sup>1</sup>	3

SPAN 200	Writing in Spanish for the Professions I <sup>1</sup>	3
SPAN 201	Speaking in Spanish for the Professions I <sup>1</sup>	3
SPAN 220	Understanding Hispanic Cultures Through Reading <sup>1</sup>	3
Select one of the following:		3
SPAN 302	Communication in Spanish for the Elementary Classroom (for College of Education students only) <sup>1</sup>	
SPAN 303	Developing Communicative and Cultural Competence for the Workplace <sup>1</sup>	
Select one of the following:		3
SPAN 300	Writing in Spanish for the Professions II <sup>1</sup>	
SPAN 301	Speaking in Spanish for the Professions II <sup>1</sup>	
SPAN 305	Spain Today <sup>1</sup>	
SPAN 307	U.S. Latino Cultures <sup>1</sup>	
SPAN 309	Hispanic Civilization for the K-12 Classroom (12-week course) <sup>1</sup>	
SPAN 318	Hispanic Children's Literature for the K-12 Classroom (12-week course) <sup>1</sup>	
SPAN 328	Latin American Today <sup>1</sup>	
SPAN 330	Spanish Literature 1800 to Present <sup>1</sup>	
SPAN 340	Introduction to Translation <sup>1</sup>	
SPAN 350	The Sounds of Spanish <sup>1</sup>	
SPAN 400	Writing in Spanish for the Professions III <sup>1</sup>	
SPAN 401	Speaking in Spanish for the Professions III <sup>1</sup>	
SPAN 431	Exploring Spanish Culture through Media <sup>1</sup>	
SPAN 432	Exploring Latin American Cultures through Media <sup>1</sup>	
SEFE 323	Teaching World Languages	
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> A grade of "C" or better is required.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN PROFESSIONAL SPANISH (84C)

This program is effective as of Fall 2020

UCC 03.05.20

Revised 08.17.20

## Spanish, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Spanish, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/spanish/>)

Languages, Literatures, Cultures, and Writing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/languages-literatures-cultures-and-writing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.00 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.
- Exemption from SPAN 101, SPAN 102, SPAN 103, SPAN 200, SPAN 201, SPAN 220 courses may be possible based on the outcome of the placement exam given by the Modern Languages Department. Both English and Native Spanish speakers should consult the Modern Languages and Cultures for information. CLEP, AP and OPI credits are acceptable for SPAN 200, SPAN 201, SPAN 220.

Code	Title	Hours
<b>Required Spanish Courses</b>		
SPAN 103	Spanish Language & Culture III <sup>1</sup>	3
SPAN 200	Writing in Spanish for the Professions I <sup>1</sup>	3
SPAN 201	Speaking in Spanish for the Professions I <sup>1</sup>	3
SPAN 220	Understanding Hispanic Cultures Through Reading <sup>1</sup>	3
Select two courses at the 300/400 Level (required) <sup>1</sup>		6
Select additional Spanish Courses to equal 18 credits in the Minor <sup>2</sup>		
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> A grade of "C" or better is required

<sup>2</sup> Any Spanish course except SPAN 101, SPAN 102, or SPAN 104.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

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on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN SPANISH (84A)

Effective Fall 2020

Revised 08.17.2020

UCC 03.05.2020

## Writing, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Writing, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/english-creative-writing/>)

Languages, Literatures, Cultures, and Writing Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/languages-literatures-cultures-and-writing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirements

Minor GPA: 2.00 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Core Courses</b>		
Select four of the following:		12
ENGL 204	Composition and Rhetoric	
ENGL 205	Introduction to Professional Writing	
ENGL 225	Introduction to Creative Writing	
ENGL 305	Practicum: Teaching Writing	
ENGL 327	Healthcare Writing	
ENGL 334	Writing Community Stories	
ENGL 335	Writing for Video Games	
ENGL 338	Creative Writing: Creative Nonfiction	
ENGL 339	Creative Writing: Fiction	
ENGL 340	Creative Writing: Poetry	
<b>Additional Courses</b>		
Select one of the following:		3
ENGL 230	Introduction to Linguistics and Grammar	
ENGL 331	Historical Development of the English Language	
ENGL 332	Modern English Grammar and Syntax	
<b>English Electives</b>		

Select two ENGL courses <sup>1</sup>	6
<b>Total Hours</b>	<b>21</b>

<sup>1</sup> Excluding ENGL 102, ENGL 104. Max 3 credits in ENGL 450.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN WRITING (24B)

This program is effective as of Summer 2022

Revised 02.21.2022

UCC 09.21.2021

## Library

Chair	Secretary	Location	Department Phone
Dr. Jessica Jordan	Emily Connell	209 Bailey Library	724-738-2663

## Faculty

### Allison Brungard

Assistant Professor  
Library

M.L.I.S., University of Pittsburgh  
B.A., Youngstown State University

### Aiping Chen-Gaffey

Associate Professor  
Library

M.L.S., University of Pittsburgh  
M.A., University of Pittsburgh  
M.A., Peking University  
B.A., Peking University

### Rocco Cremonese

Assistant Professor  
Library

M.L.I.S., University of Pittsburgh  
M.A., Slippery Rock University  
B.S., Slippery Rock University

### Heather Getsay

Associate Professor  
Library

M.L.I.S., University of Pittsburgh  
B.A., Westminster College

Jessica Jordan

Assistant Professor  
Library  
D.Ed., Slippery Rock University of Pennsylvania  
M.L.S., Clarion University of Pennsylvania  
B.S., Indiana University of Pennsylvania

#### Judith Silva

Associate Professor  
Library  
M.L.S., University of Pittsburgh  
B.A., University of California at Santa Cruz

#### Alessia Zanin Yost

Assistant Professor  
Library  
M.L.I.S., San Jose State University  
M.A., University of California Davis  
B.A., California State University

## Courses

Code	Title	Hours
LIBR 110	Introduction to Library & Information Resources	1
LIBR 139	Foundations of Academic Discovery	3
LIBR 190	Experimental	1-3
LIBR 210	Library Research Methods	3
LIBR 290	Experimental	1-3
LIBR 390	Experimental	1-3
LIBR 490	Independent Study	1-3

## Music

Chair	Secretary	Location	Department Phone
Dr. Christopher Scott	Devonne Delach	225 Swope Music Hall	724-738-2063

Department Web Site URL (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/music/>)

Department Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/music-fs.pdf>)

## Faculty

#### John Anthony

Instructor  
Music

#### Cindy Candelaria-Pieve

Assistant Professor  
Music  
D.M.A., University of Cincinnati College  
M.A., CUNY Hunter College  
B.A., University of Puerto Rico

#### Christine Carucci

Instructor  
Music

#### Nicole Cochran

Instructor  
Music

M.M., Westminster Choir College  
B.M., Juilliard School

#### Gabriel Colby

Instructor  
Music

#### Cassandra Eisenreich

Associate Professor  
Music  
D.M.A., University of Miami  
M.M., University of Miami  
B.S., Slippery Rock University of PA

#### David Glover

Associate Professor  
Music  
D.M.A., University of Texas (Austin)  
M.M., Florida State University  
B.M., University of North Florida

#### Susan Hadley

Professor  
Music  
Ph.D., Temple University  
Dip. Ed., University of Western Australia  
M.M.T., Temple University  
B.M., University of Melbourne (Australia)

#### Nicole Hahna

Associate Professor  
Music  
Ph.D., Lesley University  
M.S., Radford University  
B.S., Appalachian State University

#### Jonathan Helmick

Associate Professor  
Music  
D.M.A., University of Southern Mississippi  
M.M., University of Akron  
B.A.T., University of Akron  
B.M., University of Akron

#### Micah Holt

Instructor  
Music  
D.M.A., University of Nevada  
M.M., University of Louisville  
B.A., University of North Colorado

#### Yoona Jeong

Assistant Professor  
Music  
D.M.A., University of Texas  
M.M., Baylor University  
M.M., University of Southern California  
B.M., Seoul National University

#### Heather Johnson

Instructor  
Music  
M.M., Dana School of Music at YSU  
M.M., SUNY at Stony Brook

B.M., The Curtis Institute of Music

#### **Jason Kush**

Professor

Music

D.M.A., University of Miami

M.M., University of Miami

B.S., Slippery Rock University of Pennsylvania

#### **Timothy Little**

Assistant Professor

Music

D.M.A., University of Washington

M.M., Louisiana State University

B.M., Shenandoah Conservatory of Music

#### **Kathleen Melago**

Professor

Music

D.M.A., Ohio State University

M.M., University of Northern Iowa

B.S., Slippery Rock University

#### **Vern Miller**

Assistant Professor

Music

M.M., Temple University

B.M., Slippery Rock University

#### **Amanda Morrison**

Instructor

Music

D.M., Florida State University

M.M., Florida State University

B.M., Duquesne University

#### **Fred Perkins**

Instructor

Music

M.M., Slippery Rock University

B.M., Appalachian State University

#### **Kaylee Priddy**

Instructor

Music

#### **Paige Riggs**

Instructor

Music

D.M.A., SUNY at Stony Brook

M.M., Indiana University

B.M., Eastman School of Medicine

#### **Renate Sakins**

Instructor

Music

B.M., Temple University

B.S., University of Wisconsin

#### **Lincoln Sandham**

Instructor

Music

#### **Christopher Scott**

Associate Professor

Music

D.M.A., University of Cincinnati

M.F.A., University of Cincinnati

B.A., Augustana College

#### **Brian Stahurski**

Instructor

Music

M.M., Duquesne University

B.A., Duquesne University

#### **Glenn Utsch**

Assistant Professor

Music

Ed.D., Teachers College Columbia University

M.M.Ed., Teachers College Columbia University

M.M., Manhattan School of Music

B.M., West Chester University

#### **Philip VanOuse**

Instructor

Music

M.M., Carnegie Mellon University

B.M., Cincinnati College

#### **Timothi Williams**

Instructor

Music

M.M., Penn State University

B.M., West Liberty University

## **Programs**

### **Majors**

- Music Education (PreK-12), Bachelor of Music (BM) (p. 985)
- Music Performance, Bachelor of Music (BM) (p. 996)
- Music Therapy, Bachelor of Music (BM) (p. 1001)
- Music, Bachelor of Arts (BA) (p. 1007)

### **Minors**

- Chamber Music Performance, Minor (p. 983)
- Music for Education, Minor (p. 990)
- Music for Education: Early Childhood, Minor (p. 992)
- Music for Education: Marching Arts, Minor (p. 993)
- Music for Education: Vocal Music, Minor (p. 994)
- Music History, Minor (p. 995)
- Music, Minor (p. 1012)

### **Certificates**

- Culturally Relevant and Sustaining Music Education, Certificate (p. 984)

## **Courses**

### **MUSI 029 - Clinical Integration Lab**

This is a laboratory experience associated with Clinical Integration MUSI 229.

Corequisite(s): MUSI 229

Credits: 0

Term(s) Typically Offered: Offered Fall & Spring Terms

**MUSI 102 - Exploring World Music**

A course designed to survey non-Western musical traditions and practices. Emphasis is given to the music of India, Russia, Japan, Africa, the Middle East, and the American Indian.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Transfer Thread Completion Course, United States in Global Context

**MUSI 104 - Exploring American Music**

A survey course designed to develop student knowledge and understanding of music composed and performed in the United States between 1620 and the present.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 105 - Exploring Jazz**

The stylistic development of jazz and its relevance to society.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**MUSI 106 - Introduction to Jazz Performance**

This course will introduce the high school music student to jazz pedagogy at the university level. Emphasis will be placed on performing skills, theory, improvisation, ear training and music technology. Course may be repeated up to four credits.

Credits: 1

Term(s) Typically Offered: Offered Summer Terms

**MUSI 107 - Fundamentals of Music**

Understanding and using music notation and terminology.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

**MUSI 108 - Flute Camp**

The SRU "Flute Camp" will give high school flutists an opportunity to be on the SRU campus during the Summer Arts Academy for an intensive 2 week program involving all aspects of flute performance. Follow up involvement of the high school students during the fall semester will consist of their attendance at flute related university events and critical writing about the concerts/rehearsals/master classes they observed during the fall component.

Credits: 1

Term(s) Typically Offered: Offered Summer Terms

**MUSI 109 - Jazz Combo**

Students will meet weekly with the appropriate faculty member to work on jazz performance in the small group (combo) setting. Study of phrasing, articulation, jazz theory, improvisation, and other jazz performance practices will be addressed. Students will be auditioned at the beginning of the semester for placement. At least one public performance will be given per semester. One hour of rehearsal time per week. One credit for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 111 - Introduction to Music Education**

This course is designed to introduce the student to the field of music education. This course will be an introduction to planning and preparation for teaching music, including creating an effective classroom environment for teaching music, instructional delivery in music, historical background relevant to music education, copyright laws in the music classroom, instructional planning, diversity, and advocacy. Students will complete their Field Experience Level 1: Observation hours as a requirement of this course.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course

**MUSI 113 - Saxophone Quartet**

Students will meet weekly with the appropriate faculty member to work on literature selected for their performance ability level. Study of phrasing, articulation, balance, blend, intonation, and other performance practices will be addressed. Students will be auditioned at the beginning of the semester for placement. At least one public performance will be given per semester. Two hours per week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 114 - Symphonic Wind Ensemble**

Symphonic Wind Ensemble: A chamber ensemble composed of select musicians chosen by audition, performing contemporary literature as well as transcriptions for winds and percussion. Four and a half hours of week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 115 - Concert Choir**

Auditioned mixed chorus of 50-70 singers that studies and performs a variety of music from Renaissance to 21st century, classical to contemporary, a cappella and music accompanied by piano, chamber groups, and symphonic ensembles. Three hours per week rehearsal time. Multiple concerts are presented both on and off campus and on periodic tours. One to three credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. Entrance is by successful audition, held the first week of classes every semester; contact the instructor for information. The ensemble is also available without credit.

Credits: 1-3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 116 - University Chorus**

University Chorus is a non-auditioned ensemble open to singers from any academic discipline. This ensemble explores the fundamentals of singing and artistry within a collaborative community and through a selection of diverse repertoire. University Chorus has two ensembles that focus on higher voices and lower voices. Each semester, both sections will combine for mixed-voiced instruction on selected repertoire. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 117 - Chamber Singers**

An elite chamber choir of 16-24 outstanding singers who perform challenging repertoire with a greater emphasis on a cappella music. Members of this group are expected to display initiative to prepare music to the highest possible level of their ability. Two and one-half hours per week rehearsal time. One or two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. Entrance is by successful audition, held the first week of classes every semester; contact the instructor for information. The ensemble is also available without credit.

Corequisite(s): MUSI 115

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 118 - Marching Pride**

The Marching Pride performs during the half time at football games, both home and away, and for other special events. Much of its music is specially arranged. Open to all students. Six hours a week rehearsal during the football season. One to six credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 6 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-6

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 119 - Concert Band**

The Concert Band members are carefully selected to provide a balanced instrumentation of the best players. Music written for concert band is the main repertoire. Concerts on campus. Four hours a week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 5 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course



**MUSI 120 - Jazz Ensemble**

The SRU Jazz Ensemble performs jazz literature from all eras of jazz history including big band, bop, hard bop, fusion and contemporary. This ensemble often performs with guest artists of national and international stature, both on and off campus. Membership in this ensemble requires an audition. Three hours and forty-five minutes of rehearsal per week. One to three credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 121 - Symphony Orchestra**

Symphony Orchestra is an ensemble of musicians chosen by audition which performs a selection of diverse orchestral repertoire from the Baroque period to the present. Rehearsals will be four hours a week. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 122 - Chamber String Ensemble**

The Chamber String Ensemble is a small ensemble selected for the study and performance of chamber music written for strings. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 123 - Brass Ensemble**

The university's Brass Ensemble is a select ensemble of brass (and percussion) players who study and perform music from all historical periods. Both large brass choir works and small chamber brass works are performed. The ensemble performs on and off campus. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 124 - Woodwind Ensemble**

The Woodwind Ensemble is a small select ensemble of woodwind players who study and perform music for woodwinds from all historical periods. Three hours a week rehearsal time. One credit for every semester of satisfactory participation is granted for this music performance group, with a maximum allowance of ten credits in any one music organization. Additional credits are possible with a waiver from the departmental chairperson. The ensemble is also available without credit.

Credits: 1

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 125 - Percussion Ensemble**

This small select ensemble of percussionists studies and performs music composed and transcribed for both percussion and mallet ensembles. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 126 - Flute Choir**

The SRU Flute Choir is made up of a select group of flutists who will rehearse and perform a variety of music written for flute ensemble. Audition required. Two and a half hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 127 - Orientation to Music Therapy**

Orientation to the field of music therapy through lectures, readings, and viewing music therapy sessions. The course includes an overview of music therapy history, principles, and foundations through a survey of music therapy literature and clinical applications.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms

**MUSI 128 - Applied Alexander Technique**

This course is an introduction to the Alexander Technique in which the students will examine their habitual movement patterns in order to encourage positive energy usage within the body. This technique heightens kinesthetic sensitivity, offering performers a control that is fluid and lively, thus lessening chances of performance injury. The principles of this technique are based on an understanding of human anatomy, which promotes ease, and freedom of movement, balance, flexibility, and coordination. Course may be repeated up to two credits.

Credits: 1

**MUSI 129 - Guitar, Ukulele, & Bass Methods**

A music education course designed to prepare music education majors to teach guitar, ukulele, string bass, and electric bass in elementary and secondary schools. It will also prepare students with the functional skills to use the guitar and ukulele as accompanying instruments.

Credits: 1-2

Term(s) Typically Offered: Offered Fall Terms

Enrollment is limited to students with a program in Music Education (K-12).

**MUSI 130 - Exploring Music**

A survey course designed to develop the student perception and understanding of changing musical styles and practices in Western culture. Studying and experiencing the arts, including dance, music, theatre, and the visual arts, develops creative and aesthetic abilities. The arts introduce students not only to artists and their creations, but also to history, cultures, values, technique, imagination, creativity, and issues relevant to society. Students will gain an understanding of the creative process and how to analyze and interpret message and meaning in works of art. While the arts can bring us pleasure, they can also serve to enlighten and illuminate critical issues, lead to personal discoveries, and foster innovation in all fields. Students will learn to think critically about the arts, develop an appreciation for artistic creations, and by viewing live performances and exhibitions, become engaged audience members. Arts inquiry courses use and develop the analytic and interpretive modes of inquiry needed to understand and explore both tangible and abstract artistic works and the cultures in which they exist. In arts inquiry courses, students confront a variety of cultural and artistic expressions in order to gain an understanding of the human condition, and ultimately express their relationship to artistic work, meaning, and the creative process. Attendance at arts events will be required during this course and may require a fee.

Credits: 3

Term(s) Typically Offered: Offered Every Term

**MUSI 131 - Class Piano I**

For beginners with no previous keyboard experience. Fundamentals of note reading, beginning piano repertoire, melody harmonization and improvisation. Of particular value to the student desiring to gain a working knowledge of the piano either as a classroom tool or for personal use. Music majors only.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with department of Music.

**MUSI 132 - Class Piano II**

Continued development of skills begun in Class Piano I (MUSI 131).

Music majors only.

Prerequisite: MUSI 131<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

**MUSI 133 - Class Voice I**

Designed for the purpose of studying basic singing technique and thereby producing a good vocal tone; valuable to the student interested in improving his/her vocal skill. Music majors only.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

**MUSI 134 - Voice Methods**

The pedagogy of singing is emphasized via individual teaching demonstrations thereby enabling students to improve their ability to communicate basic vocal principles to other students. Music majors only.

Prerequisite: MUSI 133<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

**MUSI 137 - Functional Guitar for Music Therapy I**

A study of the fundamental concepts needed to play and teach beginning guitar. Students must provide their own instruments. Music majors only.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

**MUSI 138 - Functional Guitar for Music Therapy II**

Continued development of skills begun in Class Guitar I (MUSI 137).

Music majors only.

Prerequisite: MUSI 137<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

**MUSI 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**MUSI 140 - Low Brass Methods**

A study of the fundamental concepts and skills needed to play and teach trombone, baritone horn, euphonium, and tuba to homogeneous and heterogeneous instrument groups in pre-K-12 instrumental music education setting. This includes the integration and application of national and state standards for music education.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students in the College of Liberal Arts college.

Enrollment limited to students with department of Music.

**MUSI 151 - Music Theory and Analysis I**

The student will study the grammar and literature of music through composition, analysis, listening, and performance. Three class meetings each week.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms

**MUSI 154 - Musicianship Skills I**

Students will develop aural and rhythmic skills through basic rhythm reading, sight-singing, intervals and pattern recognition, simple and compound meters, and basic harmonic progressions.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

**MUSI 165 - Applied Performance Voice**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 165, 265, 365 may each be taken two times for a total of 18 credits; MUSI 465 may be taken four times for a total of 12 credits.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Music.

**MUSI 166 - Applied Performance Piano**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 166, 266, 366 may each be taken two times for a total of 18 credits; MUSI 466 may be taken four times for a total of 12 credits.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Music.

**MUSI 167 - Applied Performance Strings**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 167, 267, 367 may each be taken two times for a total of 18 credits; MUSI 467 may be taken four times for a total of 12 credits.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Music.

**MUSI 168 - Applied Performance Woodwind**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 168, 268, 368 may be taken two times for a total of 18 credits; MUSI 468 may be taken four times for a total of 12 credits.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Music.

**MUSI 169 - Applied Performance Brass**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 169, 269, 369 may each be taken two times for a total of 18 credits; MUSI 469 may be taken four times for a total of 12 credits.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Music.

**MUSI 170 - Applied Performance Percussion**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 170, 270 and 370 may each be taken two times for a total of 18 credits; MUSI 470 may be taken four times for a total of 12 credits.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Music.

**MUSI 179 - Applied Music**

With the approval of the applied music teacher, lessons are available in piano, voice, and any of the standard string, brass, woodwind or percussion instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Music.

**MUSI 181 - Applied Voice**

With the approval of the applied music teacher, lessons are available in voice. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms  
Enrollment limited to students with department of Music.

**MUSI 182 - Applied Strings**

With the approval of the applied music teacher, lessons are available in standard string instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms  
Enrollment limited to students with department of Music.

**MUSI 183 - Applied Brass**

With the approval of the applied music teacher, lessons are available in standard brass instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms  
Enrollment limited to students with department of Music.

**MUSI 184 - Applied Woodwinds**

With the approval of the applied music teacher, lessons are available in standard woodwind instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms  
Enrollment limited to students with department of Music.

**MUSI 185 - Applied Percussion**

With the approval of the applied music teacher, lessons are available in standard percussion instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms  
Enrollment limited to students with department of Music.

**MUSI 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MUSI 192 - Tuba-Euphonium Ensemble**

The SRU Tuba-Euphonium Ensemble is comprised of tuba and euphonium players who rehearse and perform a variety of music written for tuba-euphonium ensemble. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms  
Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 193 - Jazz Lab Band**

The SRU Jazz Lab Band is a rehearsal ensemble that performs one concert per academic semester. The group does require an audition which takes place in the first week of the Fall semester. If openings occur in the Spring semester, the director will hold an audition for the open seats only. The ensemble rehearses big band literature from every stylistic period in jazz history. The focus of the course is on developing sight-reading, jazz performance practice and techniques, stylistic interpretation, foundational ensemble techniques, jazz band rehearsal techniques, and exposure to the literature, history, and composers of jazz music. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms  
Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 194 - World Percussion Ensemble**

The SRU World Percussion Ensemble rehearses and performs the percussion music of cultures outside of Western Europe and the United States, concentrating on, but not exclusive to, the Caribbean (Trinidad and Tobago, Cuba, The Dominican Republic, and Puerto Rico), Asia (Japan, India, and Korea), South America (Brazil), and West Africa. Students learn the instruments, techniques, some choreography (when appropriate), and musical styles in multiple genres for at least one public performance each academic semester. The ensemble rehearses and performs on authentic instruments (whenever possible) or modern, commercially available substitutes. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**MUSI 196 - Winter Guard**

The Slippery Rock University Winter Guard is the indoor color guard performing ensemble. In this performing ensemble, students will combine the use of flags, sabers, mock rifles, and other equipment, as well as dance and interpretive movement, in shows for public performance and competition. Held in the spring semester the group performs in competition as part of the indoor marching arts circuit as well as for campus and community events. The course may be repeated up to 5 times. Additional repeats are possible with a waiver from the department chairperson.

Credits: 1-2

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MUSI 199 - Fundamental Skills in Music Therapy**

Designed to prepare music therapy majors in fundamental clinical skills in music therapy necessary for working with a variety of client populations. It includes identifying client needs, delineating goals and objectives, task analysis and treatment strategies (re-creative techniques) through the application of functional music skills. Group processes and leadership techniques appropriate for various clientele.

Prerequisites: MUSI 127<sup>D</sup> and MUSI 137<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

**MUSI 201 - Studies in Children's Music**

Listening, moving, playing instruments, singing and creating using repertoire suitable for children of various developmental levels.

Credits: 3

**MUSI 203 - Musician's Health**

This course is designed for music students, performing arts majors or any student who desires a deeper understanding of musicianship and performing artist wellness. An emphasis on healthy living for the performer including elimination of risk for injury will be discussed. The course will explore concepts such as ergonomics, good posture, and breathing and support. Students will learn about concepts such as effective practicing and the brain's perception of sound. Students will learn to identify and correct problems facing the performer when they arise.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

**MUSI 204 - Art and Science of Performing**

This course focuses on how to define, detect, and manage performance anxiety. Students will learn about the body's innate response to stress and pressure situations, and how to recognize maladaptive responses to pressure situations. Students will learn about conventional methods for treating performance anxiety as well as unconventional methods including self-analysis, meditation, guided imagery, and the Alexander technique. Pre-performance routines such as centering will be discussed. Students will learn about tools such as engaged practicing that will help to produce better performances. The concept of flow state will also be discussed.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

**MUSI 205 - Music in Recreation**

A practical study of the ways and means of planning effective music programs for leisure and recreation and developing the competencies needed by a music leader in recreation.

Credits: 3



**MUSI 206 - Fundamentals of Conducting**

In this course, students will learn the foundational skills necessary to conduct both instrumental and vocal ensembles. As an introductory course, it will serve as a catalyst for developing the lifelong conductor-practitioner regardless of area emphasis - vocal or instrumental. Fundamental skills that will be developed include, but are not limited to: conducting patterns in stationary focal point conducting, expressive gesture, baton technique and basic transpositions.

Prerequisites: MUSI 253<sup>D</sup> and MUSI 256<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with department of Music.

**MUSI 208 - Clarinet and Saxophone Methods**

A study of the fundamental concepts and skills needed to play and teach clarinet and saxophone to homogeneous and heterogeneous instrument groups in pre-K-12 instrumental music education setting. This includes the integration and application of national and state standards for music education.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students in the College of Liberal Arts college.

Enrollment limited to students with department of Music.

**MUSI 209 - Jazz Combo**

Students will meet weekly with the appropriate faculty member to work on jazz performance in the small group (combo) setting. Study of phrasing, articulation, jazz theory, improvisation, and other jazz performance practices will be addressed. Students will be auditioned at the beginning of the semester for placement. At least one public performance will be given per semester. One credit for every semester of satisfactory participation is granted for this music performance group, with a maximum allowance of ten credits in any one music organization. Additional credits are possible with a waiver from the departmental chairperson. The ensemble is also available without credit.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 212 - Fundamentals of Conducting Lab**

This course is the lab component to MUSI 206: Fundamentals of Conducting and will include application of conducting skills through time on the podium.

Prerequisites: MUSI 253<sup>C</sup> and MUSI 256<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students in the College of Liberal Arts college.

Enrollment limited to students with department of Music.

**MUSI 213 - Saxophone Quartet**

Students will meet weekly with the appropriate faculty member to work on literature selected for their performance ability level. Study of phrasing, articulation, balance, blend, intonation, and other performance practices will be addressed. Students will be auditioned at the beginning of the semester for placement. At least one public performance will be given per semester. Two hours per week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 214 - Symphonic Wind Ensemble**

Symphonic Wind Ensemble: A chamber ensemble composed of select musicians chosen by audition, performing contemporary literature as well as transcriptions for winds and percussion. Four and a half hours of week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 215 - Concert Choir**

Auditioned mixed chorus of 50-70 singers that studies and performs a variety of music from Renaissance to 21st century, classical to contemporary, a cappella and music accompanied by piano, chamber groups, and symphonic ensembles. Three hours per week rehearsal time. Multiple concerts are presented both on and off campus and on periodic tours. One to three credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. Entrance is by successful audition, held the first week of classes every semester; contact the instructor for information. The ensemble is also available without credit.

Credits: 1-3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 216 - University Chorus**

University Chorus is a non-auditioned ensemble open to singers from any academic discipline. This ensemble explores the fundamentals of singing and artistry within a collaborative community and through a selection of diverse repertoire. University Chorus has two ensembles that focus on higher voices and lower voices. Each semester, both sections will combine for mixed-voiced instruction on selected repertoire. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 217 - Chamber Singers**

An elite chamber choir of 16-24 outstanding singers who perform challenging repertoire with a greater emphasis on a cappella music. Members of this group are expected to display initiative to prepare music to the highest possible level of their ability. Two and one-half hours per week rehearsal time. One or two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. Entrance is by successful audition, held the first week of classes every semester; contact the instructor for information. The ensemble is also available without credit.

Corequisite(s): MUSI 215

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 218 - Marching Pride**

The Marching Pride performs during the half time at football games, both home and away, and for other special events. Much of its music is specially arranged. Open to all students. Six hours a week rehearsal during the football season. One to six credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 6 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-6

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 219 - Concert Band**

The Concert Band members are carefully selected to provide a balanced instrumentation of the best players. Music written for concert band is the main repertoire. Concerts on campus. Four hours a week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 5 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 220 - Jazz Ensemble**

The SRU Jazz Ensemble performs jazz literature from all eras of jazz history including big band, bop, hard bop, fusion and contemporary. This ensemble often performs with guest artists of national and international stature, both on and off campus. Membership in this ensemble requires an audition. Three hours and forty-five minutes of rehearsal per week. One to three credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 221 - Symphony Orchestra**

Symphony Orchestra is an ensemble of musicians chosen by audition which performs a selection of diverse orchestral repertoire from the Baroque period to the present. Rehearsals will be four hours a week. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 222 - Chamber String Ensemble**

The Chamber String Ensemble is a small ensemble selected for the study and performance of chamber music written for strings. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 223 - Brass Ensemble**

The university's Brass Ensemble is a select ensemble of brass (and percussion) players who study and perform music from all historical periods. Both large brass choir works and small chamber brass works are performed. The ensemble performs on and off campus. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 224 - Woodwind Ensemble**

The Woodwind Ensemble is a small select ensemble of woodwind players who study and perform music for woodwinds from all historical periods. Three hours a week rehearsal time. One credit for every semester of satisfactory participation is granted for this music performance group, with a maximum allowance of ten credits in any one music organization. Additional credits are possible with a waiver from the departmental chairperson. The ensemble is also available without credit.

Credits: 1

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 225 - Percussion Ensemble**

This small select ensemble of percussionists studies and performs music composed and transcribed for both percussion and mallet ensembles. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 226 - Flute Choir**

The SRU Flute Choir is made up of a select group of flutists who will rehearse and perform a variety of music written for flute ensemble. Audition required. Two and a half hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 228 - Therapeutic Musical Strategies**

Designed to further prepare music majors in various therapeutic musical strategies (receptive and compositional techniques) through the application of functional music skills, group processes and leadership techniques appropriate for various clientele.

Prerequisites: MUSI 127 (may be taken concurrently)<sup>D</sup> and MUSI 137<sup>\*D</sup> and MUSI 138<sup>\*D</sup> and MUSI 199<sup>\*D</sup> (may be taken concurrently).

<sup>D</sup> Requires minimum grade of D.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms

**MUSI 229 - Clinical Integration**

A supervised clinical experience allowing the music therapy student practical experience in a variety of community health care agencies and educational settings.

Prerequisites: MUSI 127<sup>D</sup> and MUSI 137<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

**MUSI 230 - Clinical Integration**

A supervised clinical experience allowing the music therapy student practical experience in a variety of community health care agencies and educational settings.

Prerequisites: MUSI 228<sup>D</sup> and MUSI 229<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

**MUSI 233 - Chamber Music Performance**

A chamber music ensemble (of various instrumental and/or vocal combinations) which studies and performs music from many style periods. Two hours a week rehearsal time. Course may be repeated up to ten credits. Permission of the instructor.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 234 - Class Piano III**

Continued development of skills acquired in Class Piano II to prepare music majors for piano proficiency exam, including sight-reading, transposition, playing by ear, technique and repertoire. Music majors only.

Prerequisite: MUSI 132<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

**MUSI 235 - Class Piano IV**

Continued development of skills acquired in Class Piano III to prepare music majors for piano proficiency exam, including sight-reading, transposition, playing by ear, technique and repertoire. Music majors only.

Prerequisite: MUSI 234<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

**MUSI 236 - Music Therapy Assessment, Measurement and Evaluation**

This course will present professional standards of music therapy practice including assessment, documentation, and evaluation; as well as techniques and application of behavioral observation and measurement in music therapy.

Prerequisites: MUSI 127<sup>D</sup> and MUSI 199<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

**MUSI 237 - Opera Performance**

Performance of scenes, arias, or full operas, taking into consideration the interest and skill of each student. Four hours of rehearsal per week; more rehearsal as needed in weeks leading to performance. One to four credits for every semester of satisfactory participation is granted for this music performance group. Additional repeats are possible with a waiver from the department chairperson. Each course number may be repeated up to five times.

Credits: 1-4

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 245 - Brass Methods**

A study of the fundamental concepts needed to play and teach beginning brass instruments (French horn, trumpet, trombone, baritone horn, tuba) both as soloists and in ensemble.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

**MUSI 247 - Percussion Methods**

A study of the fundamental concepts needed to play and teach beginning percussion instruments (pitched and non-pitched).

Credits: 1-2

Term(s) Typically Offered: Offered Fall Terms

**MUSI 253 - Music Theory and Analysis II**

This course is a continuation of Music Theory and Analysis I. The student will study musical literature written between 600-1750 through composition, analysis, aural discrimination, diatonic harmony, modal counterpoint, and performance. Three class meetings each week.

Prerequisite: MUSI 151<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

**MUSI 254 - Music Theory and Analysis III**

This course is a continuation of the Music Theory and Analysis I and II semesters in which the student will study the musical literature of the years 1750-1900 through the means of chromatic harmony, analysis, score reading, aural discrimination, composition and performance. Three class meetings each week.

Prerequisite: MUSI 253<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms

**MUSI 255 - Music Theory and Analysis IV**

This course is a continuation of the Music Theory and Analysis I, II and III sequence. Musical literature of the 20th century will be approached through analysis, listening, score reading, composition and performance. Three class meetings per week.

Prerequisite: MUSI 254<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

**MUSI 256 - Musicianship Skills II**

Students will build on the aural and rhythmic exercises established in Musicianship I through higher level rhythm reading, sight-singing, intervals and pattern recognition, simple, compound, and mixed meters, and harmonic progressions.

Prerequisites: MUSI 154<sup>C</sup> and MUSI 253<sup>\*C</sup> (may be taken concurrently).

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

**MUSI 257 - Musicianship Skills III**

Students will build on the skills established in Musicianship II by working on advanced aural and rhythmic exercises through rhythm reading, sight-singing, intervals and pattern recognition, simple, compound, and mixed meters, and harmonic progressions.

Prerequisites: MUSI 256<sup>C</sup> and MUSI 254<sup>\*C</sup> (may be taken concurrently).

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

**MUSI 258 - Musicianship Skills IV**

Students will build on the skills established in Musicianship III by working on more complex and advanced aural and rhythmic exercises through rhythm reading, sight-singing, intervals and pattern recognition, simple, compound, and mixed meters, and harmonic progressions.

Prerequisites: MUSI 257<sup>C</sup> and MUSI 255<sup>\*C</sup> (may be taken concurrently).

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

**MUSI 265 - Applied Performance Voice**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 165, 265, 365 may each be taken two times for a total of 18 credits; MUSI 465 may be taken four times for a total of 12 credits.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms  
Enrollment limited to students with department of Music.

**MUSI 266 - Applied Performance Piano**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 166, 266, 366 may each be taken two times for a total of 18 credits; MUSI 466 may be taken four times for a total of 12 credits.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms  
Enrollment limited to students with department of Music.

**MUSI 267 - Applied Performance Strings**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 167, 267, 367 may each be taken two times for a total of 18 credits; MUSI 467 may be taken four times for a total of 12 credits.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms  
Enrollment limited to students with department of Music.

**MUSI 268 - Applied Performance**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 168, 268, 368 may be taken two times for a total of 18 credits; MUSI 468 may be taken four times for a total of 12 credits.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms  
Enrollment limited to students with department of Music.

**MUSI 269 - Applied Performance Brass**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 169, 269, 369 may each be taken two times for a total of 18 credits; MUSI 469 may be taken four times for a total of 12 credits.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms  
Enrollment limited to students with department of Music.

**MUSI 270 - Applied Performance Percussion**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 170, 270 and 370 may each be taken two times for a total of 18 credits; MUSI 470 may be taken four times for a total of 12 credits.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms  
Enrollment limited to students with department of Music.

**MUSI 275 - Keyboard Music**

This course will examine the music literature for western keyboard instruments using live and recorded performances.

Credits: 3

**MUSI 276 - Songs & Singers**

This course will examine music literature for voice. Areas of consideration include solo songs, opera, oratorios, and vocal chamber music.

Credits: 3

**MUSI 278 - Literature of the American Musical Theater**

A study of the changing styles in the musical theater from 1860 to current Broadway musicals, rock operas, and operetta. Study conducted through the use of recordings, scores and participation.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MUSI 279 - Applied Piano**

With the approval of the applied music teacher, lessons are available in piano. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms  
Enrollment limited to students with department of Music.

**MUSI 281 - Applied Voice**

With the approval of the applied music teacher, lessons are available in standard voice. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms  
Enrollment limited to students with department of Music.

**MUSI 282 - Applied Strings**

With the approval of the applied music teacher, lessons are available in string instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms  
Enrollment limited to students with department of Music.

**MUSI 283 - Applied Brass**

With the approval of the applied music teacher, lessons are available in standard brass instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms  
Enrollment limited to students with department of Music.



**MUSI 284 - Applied Woodwinds**

With the approval of the applied music teacher, lessons are available in standard woodwind instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms  
Enrollment limited to students with department of Music.

**MUSI 285 - Applied Percussion**

With the approval of the applied music teacher, lessons are available in standard percussion instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms  
Enrollment limited to students with department of Music.

**MUSI 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MUSI 291 - Field Experience in Music 2: Pre-K Experience**

In this course, students will complete Field Experience Level 2: Exploration by observing and assisting in a pre-K music class taught by a certified music educator with teaching experience with pre-K students.

Prerequisite: MUSI 111<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms  
Enrollment is limited to students with a program in Music Education (K-12), Music Education or Music Ed: Early Childhood.  
Enrollment limited to students in the College of Liberal Arts college.

**MUSI 292 - Tuba-Euphonium Ensemble**

The SRU Tuba-Euphonium Ensemble is comprised of tuba and euphonium players who rehearse and perform a variety of music written for tuba-euphonium ensemble. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 293 - Jazz Lab Band**

The SRU Jazz Lab Band is a rehearsal ensemble that performs one concert per academic semester. The group does require an audition which takes place in the first week of the Fall semester. If openings occur in the Spring semester, the director will hold an audition for the open seats only. The ensemble rehearses big band literature from every stylistic period in jazz history. The focus of the course is on developing sight-reading, jazz performance practice and techniques, stylistic interpretation, foundational ensemble techniques, jazz band rehearsal techniques, and exposure to the literature, history, and composers of jazz music. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms  
Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 294 - World Percussion Ensemble**

The SRU World Percussion Ensemble rehearses and performs the percussion music of cultures outside of Western Europe and the United States, concentrating on, but not exclusive to, the Caribbean (Trinidad and Tobago, Cuba, The Dominican Republic, and Puerto Rico), Asia (Japan, India, and Korea), South America (Brazil), and West Africa. Students learn the instruments, techniques, some choreography (when appropriate), and musical styles in multiple genres for at least one public performance each academic semester. The ensemble rehearses and performs on authentic instruments (whenever possible) or modern, commercially available substitutes. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms  
Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**MUSI 296 - Winter Guard**

The Slippery Rock University Winter Guard is the indoor color guard performing ensemble. In this performing ensemble, students will combine the use of flags, sabers, mock rifles, and other equipment, as well as dance and interpretive movement, in shows for public performance and competition. Held in the spring semester the group performs in competition as part of the indoor marching arts circuit as well as for campus and community events. The course may be repeated up to 5 times. Additional repeats are possible with a waiver from the department chairperson.

Credits: 1-2

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MUSI 299 - Diction for Singers**

In this study of language diction for singers, students will learn the International Phonetic Alphabet and apply it to the singing of English and Italian songs. The course is open to all voice majors.

Prerequisites: MUSI 133<sup>D</sup> or MUSI 181<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-2

Term(s) Typically Offered: Offered Fall Terms Even

**MUSI 300 - Marching Band Techniques**

Planning and preparation of half time shows using computer assisted design software and the "corps style" approach. Leadership skills, marching band pedagogy, and hand charting techniques will also be studied.

Prerequisite: MUSI 118 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 301 - Women and Music**

Explores the musical contributions of women, a group often excluded from studies of music history, from the Middle Ages to the present. Emphasis will be placed on the changing roles of and attitudes towards women as composers, performers, teachers, writers, patrons, and instrument-builders. Focus will be on the music itself, as well as reception history and historical and sociological context. There will also be discussion on the role of gender in shaping musical ideology and experiences.

Prerequisite: MUSI 101<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 304 - Orchestral String Methods**

A study of the fundamental concepts needed to play and teach beginning orchestral string instruments. No previous experience required. Instruments are provided by the university.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 309 - Jazz Combo**

Students will meet weekly with the appropriate faculty member to work on jazz performance in the small group (combo) setting. Study of phrasing, articulation, jazz theory, improvisation, and other jazz performance practices will be addressed. Students will be auditioned at the beginning of the semester for placement. At least one public performance will be given per semester. One hour of rehearsal time per week. One credit for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 312 - Music Therapy for Children**

Application of music therapy techniques and materials in all areas of mental health and special education.

Prerequisites: MUSI 236<sup>D</sup> and (SPED 121<sup>D</sup> or SPED 122<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 313 - Saxophone Quartet**

Students will meet weekly with the appropriate faculty member to work on literature selected for their performance ability level. Study of phrasing, articulation, balance, blend, intonation, and other performance practices will be addressed. Students will be auditioned at the beginning of the semester for placement. At least one public performance will be given per semester. Two hours per week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 314 - Symphonic Wind Ensemble**

Symphonic Wind Ensemble: A chamber ensemble composed of select musicians chosen by audition, performing contemporary literature as well as transcriptions for winds and percussion. Four and a half hours of week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 315 - Concert Choir**

Auditioned mixed chorus of 50-70 singers that studies and performs a variety of music from Renaissance to 21st century, classical to contemporary, a cappella and music accompanied by piano, chamber groups, and symphonic ensembles. Three hours per week rehearsal time. Multiple concerts are presented both on and off campus and on periodic tours. One to three credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. Entrance is by successful audition, held the first week of classes every semester; contact the instructor for information. The ensemble is also available without credit.

Credits: 1-3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 316 - University Chorus**

University Chorus is a non-auditioned ensemble open to singers from any academic discipline. This ensemble explores the fundamentals of singing and artistry within a collaborative community and through a selection of diverse repertoire. University Chorus has two ensembles that focus on higher voices and lower voices. Each semester, both sections will combine for mixed-voiced instruction on selected repertoire. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 317 - Chamber Singers**

An elite chamber choir of 16-24 outstanding singers who perform challenging repertoire with a greater emphasis on a cappella music. Members of this group are expected to display initiative to prepare music to the highest possible level of their ability. Two and one-half hours per week rehearsal time. One or two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. Entrance is by successful audition, held the first week of classes every semester; contact the instructor for information. The ensemble is also available without credit.

Corequisite(s): MUSI 315

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 318 - Marching Pride**

The Marching Pride performs during the half time at football games, both home and away, and for other special events. Much of its music is specially arranged. Open to all students. Six hours a week rehearsal during the football season. One to six credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 6 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-6

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 319 - Concert Band**

The Concert Band members are carefully selected to provide a balanced instrumentation of the best players. Music written for concert band is the main repertoire. Concerts on campus. Four hours a week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 5 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building,

Conservation, Technology & Imagination, Human Diversity & Well-Being,

Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 320 - Jazz Ensemble**

The SRU Jazz Ensemble performs jazz literature from all eras of jazz history including big band, bop, hard bop, fusion and contemporary. This ensemble often performs with guest artists of national and international stature, both on and off campus. Membership in this ensemble requires an audition. Three hours and forty-five minutes of rehearsal per week.

One to three credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building,

Conservation, Technology & Imagination, Human Diversity & Well-Being,

Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 321 - Symphony Orchestra**

Symphony Orchestra is an ensemble of musicians chosen by audition which performs a selection of diverse orchestral repertoire from the Baroque period to the present. Rehearsals will be four hours a week. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building,

Conservation, Technology & Imagination, Human Diversity & Well-Being,

Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 322 - Chamber String Ensemble**

The Chamber String Ensemble is a small ensemble selected for the study and performance of chamber music written for strings. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building,

Conservation, Technology & Imagination, Human Diversity & Well-Being,

Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 323 - Brass Ensemble**

The university's Brass Ensemble is a select ensemble of brass (and percussion) players who study and perform music from all historical periods. Both large brass choir works and small chamber brass works are performed. The ensemble performs on and off campus. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building,

Conservation, Technology & Imagination, Human Diversity & Well-Being,

Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 324 - Woodwind Ensemble**

The Woodwind Ensemble is a small select ensemble of woodwind players who study and perform music for woodwinds from all historical periods. Three hours a week rehearsal time. One credit for every semester of satisfactory participation is granted for this music performance group, with a maximum allowance of ten credits in any one music organization. Additional credits are possible with a waiver from the departmental chairperson. The ensemble is also available without credit.

Credits: 1

Thematic Thread(s): Cultural Literacy & Community Building,

Conservation, Technology & Imagination, Human Diversity & Well-Being,

Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 325 - Percussion Ensemble**

This small select ensemble of percussionists studies and performs music composed and transcribed for both percussion and mallet ensembles. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building,

Conservation, Technology & Imagination, Human Diversity & Well-Being,

Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 326 - Flute Choir**

The SRU Flute Choir is made up of a select group of flutists who will rehearse and perform a variety of music written for flute ensemble. Audition required. Two and a half hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building,

Conservation, Technology & Imagination, Human Diversity & Well-Being,

Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 327 - Psychology of Music**

This course combines the study of 1) a survey and analysis of music therapy research in order to provide a foundation for developing skills in formulating a research question, reviewing the literature, designing a study, examining ethical questions related to research, analyzing data and writing reports; and 2) psychological and physiological foundations of musical behavior.

Prerequisites: (PSYC 105<sup>C</sup> or PSYC 100<sup>C</sup>) and MUSI 236<sup>D</sup>

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 329 - Clinical Integration**

A supervised clinical experience allowing the music therapy student practical experience in a variety of community health care agencies and educational settings.

Prerequisite: MUSI 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 330 - Clinical Integration**

A supervised clinical experience allowing the music therapy student practical experience community health care agencies and educational settings.

Prerequisite: MUSI 329<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 332 - Vocal Conducting**

This course is designed to give the student a practical knowledge of choral conducting techniques and a theoretical understanding of the Vocal Ensemble and its function from auditions through performance.

Prerequisites: MUSI 133<sup>D</sup> and MUSI 151<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 333 - Instrumental Conducting**

The practical aspects of learning to conduct the instrumental ensemble. Students will focus on developing expressive gestures to enhance the basic techniques. Score study, acoustical properties of the instruments, ensemble precision, balance and intonation will be addressed.

Prerequisite: MUSI 151<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 334 - Vocal & Choral Methods**

The course is designed to prepare the student to teach elementary and secondary vocal and choral music, including choosing appropriate teaching materials, incorporating relevant technology, sequencing and differentiating instruction, integrating and applying national and state standards for music education, supervising a music program, and becoming aware of professional organizations, workshops, and conferences.

Prerequisite: MUSI 206<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.



**MUSI 335 - Early Childhood, Elementary, and Secondary General Music Methods**

A music education course designed to prepare the music education major to teach general music to students in grades preK-12 through the study of appropriate musical literature, methodologies, and materials.

Prerequisite: MUSI 258<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 336 - Instrumental Methods**

Instrumental methods is a music education course designed to prepare the student for a career in elementary and secondary instrumental music, including selecting appropriate literature, repair of instruments, public relations, incorporating relevant technology, sequencing and differentiating instruction, integrating and applying national and state standards for music education, and rehearsal techniques.

Prerequisites: MUSI 129<sup>C</sup> and MUSI 140<sup>C</sup> and MUSI 206<sup>C</sup> and MUSI 208<sup>C</sup> and MUSI 247<sup>C</sup> and MUSI 304<sup>C</sup> and MUSI 376<sup>C</sup> and MUSI 377<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 337 - Instrumental Rehearsal Techniques**

In this course for music education majors, students will analyze and conduct beginning and intermediate musical scores for concert band and orchestra. The student conductor will identify performance errors and learn specific rehearsal techniques to improve the ensemble's performance. Students must register for MUSI 339 concurrently with this course to complete field experience in the public schools as part of the requirements of this course.

Prerequisites: MUSI 129<sup>C</sup> and MUSI 140<sup>C</sup> and MUSI 206<sup>C</sup> and MUSI 208<sup>C</sup> and MUSI 247<sup>C</sup> and MUSI 304<sup>C</sup> and MUSI 376<sup>C</sup> and MUSI 377<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 339 - Rehearsal Techniques Field Experience**

In this course, students will complete field experience with a focus on ensemble rehearsals in the public schools, supervised by university faculty who are certified music educators.

Prerequisites: MUSI 245<sup>D</sup> and MUSI 206<sup>D</sup> and MUSI 247<sup>D</sup> and MUSI 304<sup>D</sup> and MUSI 374<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY or MUSIC UPPER DIV REVIEW STATUS attributes.

Enrollment limited to students with department of Music.

**MUSI 350 - Computer Technology in Music**

This course will introduce students to the technologies that are prevalent in the music and arts world today. Students will study the history of music and technology and work with today's computer music technologies such as, DC-Rom and MIDI, as well as creating software through the use of the program Hypercard.

Prerequisite: MUSI 255<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 351 - Arranging & Orchestration**

This course covers the basic concepts of arranging relative to instrumental and vocal groups. Emphasis is placed on the making of arrangements in addition to the transcription of composition.

Prerequisite: MUSI 255<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 352 - Music Technology**

This course will cover the basic techniques, operation and creative use of recording equipment, electronic music equipment, and computer equipment through practical experience in the Department of Music's recording studio, electronic music studio, and computer music laboratory. Application of music technology in music education, composition, performance, and studio work will be addressed.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 353 - Music Methods Block Field Experience**

In this course, students will complete at least 50 hours of field experience in the K-12 schools, with a focus on elementary vocal/general or instrumental music, supervised by university faculty who are certified music educators.

Prerequisites: MUSI 129<sup>C</sup> and MUSI 140<sup>C</sup> and MUSI 206<sup>C</sup> and MUSI 207<sup>C</sup> and MUSI 208<sup>C</sup> and MUSI 247<sup>C</sup> and MUSI 258<sup>C</sup> and MUSI 304<sup>C</sup> and MUSI 375<sup>C</sup> and MUSI 376<sup>C</sup> and MUSI 377<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Corequisite(s): MUSI 334, MUSI 335, MUSI 336 and MUSI 354

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY or MUSIC UPPER DIV REVIEW STATUS attributes.

Enrollment limited to students with department of Music.

**MUSI 354 - Integrated Music Methods Lab**

A combined course designed to integrate general music, choral, and instrumental methods principles and lab teaching experiences for students in the Music Methods Block. Prerequisite: Admission to Teacher Candidacy Required

Corequisite(s): MUSI 334, MUSI 335, MUSI 336 and MUSI 353

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY or MUSIC UPPER DIV REVIEW STATUS attributes.

Enrollment limited to students in the College of Liberal Arts college.

Enrollment limited to students with department of Music.

**MUSI 357 - Music Education for Diverse Learners**

This course provides an introduction to music education approaches and instructional foundations as well as the application of historical and instructional foundations of music with diverse learners. Major topics and developments in the field of special education, important terminology, curricular issues, and diversity, equity, and inclusion are explored. Students will learn about the characteristics of students with specific needs, the educational effects of these needs, appropriate adaptations, as well as music education approaches with diverse learners. Graduate students will analyze research applicable to music education for the diverse learner and apply it to the music education setting.

Prerequisite: SPED 121<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 359 - History of Music I**

A survey of musical styles from the ages of classical Greece and Rome through the Baroque period. Important composers and their literature will be discussed in relation to artistic, social, political, and economic conditions of their period. A reading knowledge of music is essential.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 360 - Keyboard Improvisation**

Melody harmonization and improvisation at the keyboard in 20th century popular and jazz styles. One class meeting and one laboratory session each week.

Prerequisite: MUSI 235<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 361 - Instrumental Improvisation**

This course teaches the basic concepts of improvisation, chord notation and chord styles in popular and jazz music scales. Open to all instrumentalists.

Prerequisite: MUSI 254<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 365 - Applied Performance Voice**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 165, 265, 365 may each be taken two times for a total of 18 credits; MUSI 465 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 366 - Applied Performance Piano**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 166, 266, 366 may each be taken two times for a total of 18 credits; MUSI 466 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 367 - Applied Performance Strings**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 167, 267, 367 may each be taken two times for a total of 18 credits; MUSI 467 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 368 - Applied Performance**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 168, 268, 368 may be taken two times for a total of 18 credits; MUSI 468 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 369 - Applied Performance Brass**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 169, 269, 369 may each be taken two times for a total of 18 credits; MUSI 469 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 370 - Applied Performance**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 170, 270 and 370 may each be taken two times for a total of 18 credits; MUSI 470 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 373 - History of Music II**

This course examines the music and culture from the period of the Rococo to the present. Lectures, readings, performances and listening sessions develop the student's musical understanding of the period. A reading knowledge of music is essential.

Prerequisite: MUSI 151<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 374 - Woodwind Methods**

A study of the fundamental concepts needed to play and teach beginning instruments of the woodwind family and the factors peculiar to each instrument (flute, oboe, clarinet, bassoon and saxophone). Students must register for MUSI 375 concurrently with this course to complete field experience in the public schools as part of the requirements of this course.

Corequisite(s): MUSI 375

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**MUSI 375 - Woodwind Methods Field Experience**

In this course, students will complete field experience with a focus on teaching individual and/or group instrumental lessons in the public schools, supervised by university faculty who are certified music educators. Acceptance into Teacher Candidacy.

Corequisite(s): MUSI 374

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY or MUSIC UPPER DIV REVIEW STATUS attributes.

Enrollment limited to students with department of Music.

**MUSI 376 - Flute, Oboe, & Bassoon Methods**

A study of the fundamental concepts and skills needed to play and teach flute, oboe, and bassoon to homogeneous and heterogeneous instrument groups in pre-K-12 instrumental music education setting. This includes the integration and application of national and state standards for music education. Pre-requisites: Admission to Teacher Candidacy required

Credits: 2

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students in the College of Liberal Arts college.

Enrollment limited to students with department of Music.

**MUSI 377 - High Brass Methods**

A study of the fundamental concepts and skills needed to play and teach trumpet and French horn to homogeneous and heterogeneous instrument groups in pre-K-12 instrumental music education setting. This includes the integration and application of national and state standards for music education.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students in the College of Liberal Arts college.

Enrollment limited to students with department of Music.

**MUSI 379 - Applied Piano**

With the approval of the applied music teacher, lessons are available in standard piano. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 381 - Applied Voice**

With the approval of the applied music teacher, lessons are available in standard voice. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 382 - Applied Strings**

With the approval of the applied music teacher, lessons are available in standard string instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 383 - Applied Brass**

With the approval of the applied music teacher, lessons are available in standard brass instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 384 - Applied Woodwinds**

With the approval of the applied music teacher, lessons are available in standard woodwind instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 385 - Applied Percussion**

With the approval of the applied music teacher, lessons are available in standard percussion instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 387 - Applied Counterpoint I**

This study and practice of writing music according to contrapuntal theory of the 16th century. Course may be repeated for up to 3 credits.

Prerequisite: MUSI 255<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 388 - Applied Counterpoint II**

The study and practice of writing music according to contrapuntal theory of the 18th century. Course may be repeated for up to 3 credits.

Prerequisite: MUSI 255<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 389 - Applied Composition**

Compositional techniques relative to the student's interest will be studied through an analysis of works by major composers. Although no definite idiom is prescribed, contemporary techniques are encouraged. May be repeated for up to three credits.

Prerequisite: MUSI 255<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 391 - Applied Electronic Composition**

A course designed to present the elements involved in electronic composition. The student will compose using magnetic tape, computer, and synthesizer. Course may be repeated for up to 3 credits.

Prerequisites: MUSI 255<sup>D</sup> or MUSI 352<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 392 - Tuba-Euphonium Ensemble**

The SRU Tuba-Euphonium Ensemble is comprised of tuba and euphonium players who rehearse and perform a variety of music written for tuba-euphonium ensemble. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 393 - Jazz Lab Band**

The SRU Jazz Lab Band is a rehearsal ensemble that performs one concert per academic semester. The group does require an audition which takes place in the first week of the Fall semester. If openings occur in the Spring semester, the director will hold an audition for the open seats only. The ensemble rehearses big band literature from every stylistic period in jazz history. The focus of the course is on developing sight-reading, jazz performance practice and techniques, stylistic interpretation, foundational ensemble techniques, jazz band rehearsal techniques, and exposure to the literature, history, and composers of jazz music. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 394 - World Percussion Ensemble**

The SRU World Percussion Ensemble rehearses and performs the percussion music of cultures outside of Western Europe and the United States, concentrating on, but not exclusive to, the Caribbean (Trinidad and Tobago, Cuba, The Dominican Republic, and Puerto Rico), Asia (Japan, India, and Korea), South America (Brazil), and West Africa. Students learn the instruments, techniques, some choreography (when appropriate), and musical styles in multiple genres for at least one public performance each academic semester. The ensemble rehearses and performs on authentic instruments (whenever possible) or modern, commercially available substitutes. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 396 - Winter Guard**

The Slippery Rock University Winter Guard is the indoor color guard performing ensemble. In this performing ensemble, students will combine the use of flags, sabers, mock rifles, and other equipment, as well as dance and interpretive movement, in shows for public performance and competition. Held in the spring semester the group performs in competition as part of the indoor marching arts circuit as well as for campus and community events. The course may be repeated up to 5 times. Additional repeats are possible with a waiver from the department chairperson.

Credits: 1-2

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**MUSI 399 - Diction for Singers II**

In this study of language diction for singers, students will continue the study of the International Phonetic Alphabet and apply it to the singing of German and French art songs. The course is open to all voice majors.

Credits: 1-2

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Music, Music - Voice, Music Education (K-12), Music Educ-Voice (K-12), Music Performance, Music Performance-Voice, Music Therapy or Music Therapy-Voice.

**MUSI 402 - Teaching General Music Through Distance Education**

This course is designed to provide students with the knowledge and skills necessary to effectively teach general music through distance or cyber education.

Prerequisites: PE 411<sup>C</sup> and PE 421<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**MUSI 403 - Teaching Music Performance Through Distance Education**

This course is designed to provide students with the knowledge and skills necessary to effectively teach music performance through distance or cyber education.

Prerequisites: PE 302<sup>C</sup> and PE 303<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**MUSI 404 - Field Experience Immersion in Music**

In this course, students will participate in field experience through observing, assisting and teaching while being immersed in the culture of a different population. Travel expenses, which may include lodging, airfare, meals and other expenses, will be required as part of this course. Admission to Teacher Candidacy required.

Credits: 1

Term(s) Typically Offered: Offered Winter Terms Even

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY or MUSIC UPPER DIV REVIEW STATUS attributes.

Enrollment limited to students with department of Music.

**MUSI 406 - Advanced Conducting**

In this course, students will develop advanced skills of conducting instrumental and vocal ensembles, including but not limited to: expanding technique beyond stationary focal point conducting to variable focal point conducting, developing gestural vocabulary guided by the Laban Method and developing advanced score study and analysis.

Prerequisite: MUSI 206<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 407 - Choral Rehearsal Techniques**

In this course for music education majors, students will analyze and conduct beginning and intermediate musical scores for choir. The student conductor will identify performance errors and learn to use various rehearsal techniques to improve the ensemble's performance. Students will also survey and learn performance practice for choral literature of all historical stylistic periods, and discuss numerous aspects of choral pedagogy, such as designing curriculum for and administering a choral program.

Prerequisites: MUSI 406<sup>C</sup> and (MUSI 115<sup>C</sup> or MUSI 215<sup>C</sup> or MUSI 315<sup>C</sup> or MUSI 415<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 408 - Professional Preparation for the Music Job Search**

In this class, which is designed for music majors, students will create a resume, cover letter, and a portfolio; will engage in interview practice; and will form strategies for approaching the job search. The course is intended to be taken by students who will be entering the job search soon.

Credits: 1

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1 or Senior 2.

Enrollment limited to students with department of Music.

**MUSI 409 - Jazz Combo**

Students will meet weekly with the appropriate faculty member to work on jazz performance in the small group (combo) setting. Study of phrasing, articulation, jazz theory, improvisation, and other jazz performance practices will be addressed. Students will be auditioned at the beginning of the semester for placement. At least one public performance will be given per semester. One hour of rehearsal time per week. One credit for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 413 - Saxophone Quartet**

Students will meet weekly with the appropriate faculty member to work on literature selected for their performance ability level. Study of phrasing, articulation, balance, blend, intonation, and other performance practices will be addressed. Students will be auditioned at the beginning of the semester for placement. At least one public performance will be given per semester. Two hours per week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 414 - Symphonic Wind Ensemble**

Symphonic Wind Ensemble: A chamber ensemble composed of select musicians chosen by audition, performing contemporary literature as well as transcriptions for winds and percussion. Four and a half hours of week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 415 - Concert Choir**

Auditioned mixed chorus of 50-70 singers that studies and performs a variety of music from Renaissance to 21st century, classical to contemporary, a cappella and music accompanied by piano, chamber groups, and symphonic ensembles. Three hours per week rehearsal time. Multiple concerts are presented both on and off campus and on periodic tours. One to three credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. Entrance is by successful audition, held the first week of classes every semester; contact the instructor for information. The ensemble is also available without credit.

Credits: 1-3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 416 - University Chorus**

University Chorus is a non-auditioned ensemble open to singers from any academic discipline. This ensemble explores the fundamentals of singing and artistry within a collaborative community and through a selection of diverse repertoire. University Chorus has two ensembles that focus on higher voices and lower voices. Each semester, both sections will combine for mixed-voiced instruction on selected repertoire. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 417 - Chamber Singers**

An elite chamber choir of 16-24 outstanding singers who perform challenging repertoire with a greater emphasis on a cappella music. Members of this group are expected to display initiative to prepare music to the highest possible level of their ability. Two and one-half hours per week rehearsal time. One or two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. Entrance is by successful audition, held the first week of classes every semester; contact the instructor for information. The ensemble is also available without credit.

Corequisite(s): MUSI 415

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 418 - Marching Pride**

The Marching Pride performs during the half time at football games, both home and away, and for other special events. Much of its music is specially arranged. Open to all students. Six hours a week rehearsal during the football season. One to six credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 6 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-6

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 419 - Concert Band**

The Concert Band members are carefully selected to provide a balanced instrumentation of the best players. Music written for concert band is the main repertoire. Concerts on campus. Four hours a week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 5 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 420 - Jazz Ensemble**

The SRU Jazz Ensemble performs jazz literature from all eras of jazz history including big band, bop, hard bop, fusion and contemporary. This ensemble often performs with guest artists of national and international stature, both on and off campus. Membership in this ensemble requires an audition. Three hours and forty-five minutes of rehearsal per week. One to three credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 421 - Symphony Orchestra**

Symphony Orchestra is an ensemble of musicians chosen by audition which performs a selection of diverse orchestral repertoire from the Baroque period to the present. Rehearsals will be four hours a week. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 422 - Chamber String Ensemble**

The Chamber String Ensemble is a small ensemble selected for the study and performance of chamber music written for strings. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 423 - Brass Ensemble**

The university's Brass Ensemble is a select ensemble of brass (and percussion) players who study and perform music from all historical periods. Both large brass choir works and small chamber brass works are performed. The ensemble performs on and off campus. Two hours a week rehearsal time. One credit for every semester of satisfactory participation is granted for this music performance group, with a maximum allowance of ten credits in any one music organization. Additional credits are possible with a waiver from the departmental chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 424 - Woodwind Ensemble**

The Woodwind Ensemble is a small select ensemble of woodwind players who study and perform music for woodwinds from all historical periods. Three hours a week rehearsal time. One credit for every semester of satisfactory participation is granted for this music performance group, with a maximum allowance of ten credits in any one music organization. Additional credits are possible with a waiver from the departmental chairperson. The ensemble is also available without credit.

Credits: 1

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**MUSI 425 - Percussion Ensemble**

This small select ensemble of percussionists studies and performs music composed and transcribed for both percussion and mallet ensembles. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms  
Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**MUSI 426 - Flute Choir**

The SRU Flute Choir is made up of a select group of flutists who will rehearse and perform a variety of music written for flute ensemble. Audition required. Two and a half hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms  
Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 428 - Music Therapy Advanced Topics**

Seminar in professional ethics, disability studies, race theory, and feminism.

Prerequisites: MUSI 327<sup>D</sup> and MUSI 330<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Music, Music Education (K-12), Music Performance or Music Therapy.

**MUSI 431 - Pedagogy**

Acquaintance with the philosophy, theories, techniques, materials, and practical applications of teaching applied music on the student's major instrument of study. Laboratory experience under the supervision of the instructor will be an integral part of the course.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 432 - Clinical Integration**

A supervised clinical experience allowing the music therapy student practical experience in a variety of community health care agencies and educational settings.

Prerequisite: MUSI 330<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 433 - Clinical Integration**

A supervised clinical experience allowing the music therapy student practical experience in a variety of community health care agencies and educational settings.

Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 437 - Opera Performance**

Performance of scenes, arias, or full operas, taking into consideration the interest and skill of each student. Four hours of rehearsal per week; more rehearsal as needed in weeks leading to performance. One to four credits for every semester of satisfactory participation is granted for this music performance group. Additional repeats are possible with a waiver from the department chairperson. Each course number may be repeated up to five times.

Credits: 1-4

Term(s) Typically Offered: Offered Fall & Spring Terms  
Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 440 - Music Therapy for Adult Clients**

Application of music therapy techniques and materials in all areas of mental health, corrections, and special education. Emphasis is placed on adult populations and group dynamics.

Prerequisites: MUSI 312<sup>D</sup> and MUSI 432<sup>D</sup> and PSYC 276<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 450 - Music Therapy Internship**

A continuous six-month internship in an approved music therapy program under the direction of a Board Certified Music Therapist. Required of all candidates for graduation.

Prerequisites: MUSI 428<sup>D</sup> and MUSI 440<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students in the BM 5273 program.

**MUSI 455 - Student Teaching - Music**

Under the guidance of a cooperating teacher and university supervisor, students engage in two eight-week assignments on a full-time basis in specified school districts and attend scheduled seminars. Supervisors assign additional requirements.

Prerequisites: MUSI 334<sup>D</sup> and MUSI 335<sup>D</sup> and MUSI 336<sup>D</sup> and MUSI 337<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 12

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY or MUSIC UPPER DIV REVIEW STATUS attributes.

Enrollment limited to students with department of Music.

**MUSI 456 - Social Emotional Learning in Music Education**

This course will explore the unique position of music education in addressing the social emotional learning competencies of self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. Music, by its very nature, is both social and emotional. In this course, you will learn how to integrate the SEL competencies into music education to create an environment where great teaching enriches the lives of students through the fostering of their SEL skills right alongside their musical development.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 457 - Popular Music Pedagogy**

The purpose of this course is to develop student achievement through the exploration of a modern band ensemble. The course will introduce the skills necessary to perform on electric guitar, acoustic guitar, electric bass, keyboard, drums, vocals, and technology. With an emphasis on the music styles of the last 50 years, many of these will be discussed, demonstrated, and performed by the students. The course will also foster peer-to-peer development in the band setting while encouraging each band to perform cohesively as a single unit. Students in Popular Music Pedagogy will also be introduced to the art of composition and improvisation.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 458 - Diversity, Equity, and Inclusion in Wind Band Literature**

This course will focus on issues of diversity, equity, and inclusion in the wind band profession, particularly related to wind band repertoire and equitable programming practices. In this course, students will engage with first-hand accounts from underrepresented communities in the wind band profession contextualized against a brief history of the wind band and its repertoire. Students will identify and analyze historical systems and structures influencing repertoire development. Diverse works by diverse composers at a variety of grade levels will be studied as well as resources to immediately implement equitable programming practices in the classroom today.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 465 - Applied Performance Voice**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 165, 265, 365 may each be taken two times for a total of 18 credits; MUSI 465 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 466 - Applied Performance Piano**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 166, 266, 366 may each be taken two times for a total of 18 credits; MUSI 466 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 467 - Applied Performance Strings**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 167, 267, 367 may each be taken two times for a total of 18 credits; MUSI 467 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.



**MUSI 468 - Applied Performance**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 168, 268, 368 may be taken two times for a total of 18 credits; MUSI 468 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 469 - Applied Performance Brass**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 169, 269, 369 may each be taken two times for a total of 18 credits; MUSI 469 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 470 - Applied Performance**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 170, 270 and 370 may each be taken two times for a total of 18 credits; MUSI 470 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 230<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 473 - History of Popular Musics**

This course examines the musical history of popular musics from 1900 to the present including styles such as jazz, blues, country, rock and roll, rhythm & blues, rap, hip-hop, and music of various cultures. An emphasis on understanding the cultural context of the composers and music will be provided throughout this course highlighting social and political influences on popular musics.

Prerequisites: (MUSI 101<sup>D</sup> or MUSI 130<sup>D</sup>) or MUSI 102<sup>D</sup> or MUSI 104<sup>D</sup> or MUSI 105<sup>D</sup> or MUSI 151<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 479 - Applied Piano**

With the approval of the applied music teacher, lessons are available in standard piano. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisite: minimum score of Y in 'Musicianship Health Competency' Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 481 - Applied Voice**

With the approval of the applied music teacher, lessons are available in standard voice. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 482 - Applied Strings**

With the approval of the applied music teacher, lessons are available in standard string instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 483 - Applied Brass**

With the approval of the applied music teacher, lessons are available in standard brass instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 484 - Applied Woodwinds**

With the approval of the applied music teacher, lessons are available in standard woodwind instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 485 - Applied Percussion**

With the approval of the applied music teacher, lessons are available in standard percussion instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 487 - Applied Counterpoint I**

This study and practice of writing music according to contrapuntal theory of the 16th century. Course may be repeated for up to 3 credits.

Prerequisite: MUSI 255<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 488 - Applied Counterpoint II**

The study and practice of writing music according to contrapuntal theory of the 18th century. Course may be repeated for up to 3 credits.

Prerequisite: MUSI 255<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 489 - Applied Composition**

Compositional techniques relative to the student's interest will be studied through an analysis of works by major composers. Although no definite idiom is prescribed, contemporary techniques are encouraged. May be repeated for up to three credits.

Prerequisite: MUSI 255<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 490 - Independent Study**

Students have an opportunity to study selected areas in greater concentration under the direction of a music faculty. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 491 - Applied Electronic Composition**

A course designed to present the elements involved in electronic composition. The student will compose using magnetic tape, computer, and synthesizer. Course may be repeated for up to 3 credits.

Prerequisites: MUSI 255<sup>D</sup> or MUSI 352<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 492 - Tuba-Euphonium Ensemble**

The SRU Tuba-Euphonium Ensemble is comprised of tuba and euphonium players who rehearse and perform a variety of music written for tuba-euphonium ensemble. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 493 - Jazz Lab Band**

The SRU Jazz Lab Band is a rehearsal ensemble that performs one concert per academic semester. The group does require an audition which takes place in the first week of the Fall semester. If openings occur in the Spring semester, the director will hold an audition for the open seats only. The ensemble rehearses big band literature from every stylistic period in jazz history. The focus of the course is on developing sight-reading, jazz performance practice and techniques, stylistic interpretation, foundational ensemble techniques, jazz band rehearsal techniques, and exposure to the literature, history, and composers of jazz music. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 494 - World Percussion Ensemble**

The SRU World Percussion Ensemble rehearses and performs the percussion music of cultures outside of Western Europe and the United States, concentrating on, but not exclusive to, the Caribbean (Trinidad and Tobago, Cuba, The Dominican Republic, and Puerto Rico), Asia (Japan, India, and Korea), South America (Brazil), and West Africa. Students learn the instruments, techniques, some choreography (when appropriate), and musical styles in multiple genres for at least one public performance each academic semester. The ensemble rehearses and performs on authentic instruments (whenever possible) or modern, commercially available substitutes. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 496 - Winter Guard**

The Slippery Rock University Winter Guard is the indoor color guard performing ensemble. In this performing ensemble, students will combine the use of flags, sabers, mock rifles, and other equipment, as well as dance and interpretive movement, in shows for public performance and competition. Held in the spring semester the group performs in competition as part of the indoor marching arts circuit as well as for campus and community events. The course may be repeated up to 5 times. Additional repeats are possible with a waiver from the department chairperson.

Credits: 1-2

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 499 - Applied Recital**

The purpose of this course is to give the performance majors an opportunity to perform a full recital on their major instrument. It will be taken in addition to study in the student's major applied area. Course may be repeated up to two credits.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Music Performance.

## Chamber Music Performance, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Music Performance Program Page (<https://www.sru.edu/academics/majors-and-minors/music-performance/>)

Music Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/music/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Minor GPA: 2.00 or higher

### MINOR REQUIREMENTS

- Students must complete at least 9 credit hours of MUSI in their minor from SRU.

- Students must complete at least 6 credit hours in their minor from SRU.
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above).
- A minor shall be no fewer than 18 credits.
- Students must earn a grade of "C" or higher in all coursework.

Code	Title	Hours
<b>Required Foundations of Performance Coursework</b>		
MUSI 203	Musician's Health	1
MUSI 204	Art and Science of Performing	1
<b>Chamber Music Electives</b>		
<i>Select 16 credits - at least 6 credits must be at 300/400 level; at least 12 chamber ensemble experiences are required</i>		16
MUSI 109-409	Jazz Combo	
MUSI 113-413	Saxophone Quartets	
MUSI 117-417	Chamber Singers	
MUSI 120-420	Jazz Ensemble	
MUSI 122-422	Chamber String Ensemble	
MUSI 123-423	Brass Ensemble	
MUSI 125-425	Percussion Ensemble	
MUSI 126-426	Flute Choir	
MUSI 192-492	Tuba-Euphonium Ensemble	
MUSI 193-493	Jazz Lab Band	
MUSI 194-494	World Percussion Ensemble	
MUSI 196-496	Winter Guard	
MUSI 206	Fundamentals of Conducting <sup>1</sup>	
MUSI 212	Fundamentals of Conducting Lab <sup>1</sup>	
MUSI 233	Chamber Music Performance <sup>1</sup>	
MUSI 237, 437	Opera Performance <sup>1</sup>	
MUSI 360	Keyboard Improvisation <sup>1</sup>	
MUSI 361	Instrumental Improvisation <sup>1</sup>	
MUSI 406	Advanced Conducting <sup>1</sup>	
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> Four credits in Chamber Music electives may come from Chamber Music experiences.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN CHAMBER MUSIC PERFORMANCE (56F)

Revised 06.03.2021

UCC 02.16.2021

# Culturally Relevant and Sustaining Music Education, Certificate

This program will provide undergraduate students, mainly music majors and minors, with the knowledge and skills to create a more culturally relevant and sustaining classroom for their students through focused study in courses designed to meet the needs of today's diverse music classrooms.

To access Certificate Requirements, please view the Curriculum Guide tab.

## Related Links

Culturally Relevant and Sustaining Music Education, Certificate Program Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/music/programs/>)

Music Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/music/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Certificate GPA: 2.00 or higher

### CERTIFICATE REQUIREMENTS

Code	Title	Hours
<b>Required Courses</b>		
Select three of the following:		9
MUSI 357	Music Education for Diverse Learners	
MUSI 456	Social Emotional Learning in Music Education	
MUSI 457	Popular Music Pedagogy	
MUSI 458	Diversity, Equity, and Inclusion in Wind Band Literature	
<b>Total Hours</b>		<b>9</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

## CERTIFICATE IN CULTURALLY RELEVANT AND SUSTAINING MUSIC EDUCATION (5CME)

This program is effective as of Summer 2022

Revised: 06.28.2022

# Music Education (PreK-12), Bachelor of Music (BM)

The Bachelor of Music in Music Education prepares individuals to teach instrumental, vocal, and general music to students in grades PreK-12. For additional information about our Music Education Program, contact the following faculty:

- Dr. Cassandra Eisenreich (Elementary Music)
- Dr. Jonathan Helmick (Band and Conducting)
- Dr. Kathleen Melago (Division Head of Music Education & Student Teacher Training)
- Dr. Timothy Little-Tran (Choir and Conducting)

For information regarding auditions for the Music Department, please click here (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/music/auditions/>).

## Program Learning Outcomes

- The student will be able to identify and interpret the basic elements of music both visually and aurally, including analyzing musical compositions, focusing on theoretical and historical aspects. (UO: 2,6)
- The student will be able to identify and explain the significance of music of a variety of historical periods, cultures, and composers. (UO: 2,6)
- The student will be able to harmonize, transpose, compose, arrange, and orchestrate music using knowledge of music theory and instrumental and vocal characteristics. (UO: 2,6)
- The student will be able to perform as a member of a musical ensemble demonstrating proper techniques of ensemble performance such as balance and blend, as well as musical and social interaction and cooperation, to achieve shared goals. (UO: 2,5,6,7,8,9)
- The student will be able to perform his/her primary instrument with appropriate techniques of posture, breathing, tone production, articulation/bowing, diction, intonation, expression, and style. (UO: 2,5,6)
- The student will be able to demonstrate knowledge of instrumental/vocal repertoire by performing music of different styles, periods, and composers. (UO: 2,6)
- The student will be able to analyze a written score and effectively apply basic conducting patterns, techniques, expression, and rehearsal techniques to realize musical events through the use of gesture with vocal and instrumental ensembles. (UO: 2,6)
- The student will be able to play scales, accompaniments, song repertoire, songs by ear, and transpose melodies with harmonization on the guitar. (UO: 2,6)
- The student will be able to explain and identify jazz concepts and styles and improvise. (UO: 1,2,6)
- The student will be able to play scales, repertoire, hymns, vocal scores, accompaniments, songs by ear, and transposed melodies with harmonization on the piano. (UO: 2,6)
- The student will be able to employ creative strategies to express feelings, perform music, and select resources and procedures for instruction with their students. (UO: 1,2,5,6)
- The student will be able to identify instrumental/vocal strengths and weaknesses and provide appropriate instruction to improve performance of students/self. (UO: 2,6)
- The student will be able to use technology in composition, performance, analysis, teaching, and research. (UO: 2,6,10)
- Using informal and formal assessment measures, the student will be able to assess the musical skills of their students, including identifying and correcting discrepancies between an aural perception of performance and visual perception of the music score, implementing developmental and remedial experiences that will provide alternate ways for their students to achieve musical objectives when needed. (UO: 1,2,6,7,8,9,10)
- The student will be able to create a positive learning environment by using classroom management procedures and motivational techniques that provide their students with opportunities for optimal learning. (UO: 1,5,7,8)
- The student will be able to perform tuning, warm-ups, technical exercises, repertoire, and general maintenance/health as applicable on string, brass, woodwind, and percussion instruments and the voice, appropriate for beginning to intermediate students. (UO: 1,2,6)
- The student will be able to apply concepts of stationary fundamentals, moving fundamentals, staging, sound design, and general effect to successfully create, perform, and instruct both drill and music as a part of the contemporary marching arts. (UO: 1,2,6,7,8)
- The student will be able to promote and implement multicultural and interdisciplinary awareness. (UO: 1,8,9)
- The student will be able to draw upon knowledge of emotional, intellectual, social, physical, and psychological development while planning, assessing, and teaching students of all ages by creating instructional plans with objectives, standards, materials, procedures, accommodations, assessment, and reflection. (UO: 1,7,8,9)
- The student will be able to use critical-thinking skills and communicate effectively in oral, written, and electronic modes. (UO: 1,2,10)
- The student will be able to exhibit professional attributes and personal characteristics that contribute toward excellence in teaching, including attaining a level of musicianship necessary to present oneself as a role model for students and demonstrating professional responsibility by successfully completing organizational and administrative responsibilities. (UO: 1,5,7,8,9,10)

## Related Links

Music Education, BM Program Page (<https://www.sru.edu/academics/majors-and-minors/music-education/>)

Music Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/music/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Overall GPA for Teacher Candidacy: 2.8 or higher



GPA required to graduate: 3.0 or higher

Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	87

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select one of the following:		3
MUSI 114-414	Symphonic Wind Ensemble	
MUSI 115-415	Concert Choir	
MUSI 116-416	University Choir	
MUSI 118-418	Marching Pride	
MUSI 119-419	Concert Band	
MUSI 121-421	Symphony Orchestra	

Humanities Inquiry

Select 3 Credits (p. 29)		3
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Social Science Inquiry

Requirement Waived		
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Natural Sciences Inquiry

SCI 101	Science of Life	3
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Physical Sciences Inquiry

SCI 102	Understanding the Physical World	3
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Subtotal		12
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Additional Rock Studies 2 Requirements

SPED 121	Overview of Special Education	3
CDEV 248	Human Development and Education	3
SEFE 326	ELL Strategies and Practice	3
SEFE 342	Educational Psychology for Diverse Learners	3

Select one of the following:		3
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MATH 113-499	Math Requirement	
STAT 152	Elementary Statistics I	

Subtotal	15
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<b>Total Hours</b>	<b>42</b>
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<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	

<b>Total Hours</b>	<b>0-3</b>
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Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	

<b>Total Hours</b>	<b>0-3</b>
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DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

Major Requirements

- 44 major credits must be taken at SRU or PASSHE
- 44 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Music Courses</b>		
Students must earn a "C" or higher in Musicianship Skills, Music Theory and Music Ed courses <sup>1</sup>		
MUSI 111	Introduction to Music Education	3
MUSI 129	Guitar, Ukulele, & Bass Methods <sup>2,3</sup>	2
MUSI 133	Class Voice I <sup>2,3</sup>	1
MUSI 140	Low Brass Methods <sup>2,3</sup>	2
MUSI 151	Music Theory and Analysis I <sup>2,3</sup>	2
MUSI 154	Musicianship Skills I <sup>2,3</sup>	1
MUSI 203	Musician's Health <sup>2,3</sup>	1
MUSI 206	Fundamentals of Conducting <sup>2,3</sup>	1
MUSI 208	Clarinet and Saxophone Methods <sup>2,3</sup>	2
MUSI 212	Fundamentals of Conducting Lab <sup>2,3</sup>	1
MUSI 247	Percussion Methods <sup>2,3</sup>	2
MUSI 253	Music Theory and Analysis II <sup>2,3</sup>	2

MUSI 254	Music Theory and Analysis III <sup>2,3</sup>	2
MUSI 255	Music Theory and Analysis IV <sup>2,3</sup>	2
MUSI 256	Musicianship Skills II <sup>2,3</sup>	1
MUSI 257	Musicianship Skills III <sup>2,3</sup>	1
MUSI 258	Musicianship Skills IV <sup>2,3</sup>	1
MUSI 291	Field Experience in Music 2: Pre-K Experience <sup>2</sup>	1
MUSI 300	Marching Band Techniques <sup>2,3</sup>	2
MUSI 304	Orchestral String Methods <sup>2,3</sup>	2
MUSI 334	Vocal & Choral Methods <sup>2,3</sup>	2
MUSI 335	Early Childhood, Elementary, and Secondary General Music Methods <sup>2,3</sup>	2
MUSI 336	Instrumental Methods <sup>2,3</sup>	2
MUSI 337	Instrumental Rehearsal Techniques <sup>2,3</sup>	1
MUSI 339	Rehearsal Techniques Field Experience <sup>2</sup>	1
MUSI 353	Music Methods Block Field Experience <sup>2</sup>	1
MUSI 354	Integrated Music Methods Lab <sup>2,3</sup>	1
MUSI 357	Music Education for Diverse Learners <sup>2,3</sup>	3
MUSI 359	History of Music I <sup>2</sup>	3
Select one of the following:		1
MUSI 360	Keyboard Improvisation <sup>2</sup>	
MUSI 361	Instrumental Improvisation <sup>2</sup>	
MUSI 373	History of Music II <sup>2</sup>	3
MUSI 376	Flute, Oboe, & Bassoon Methods <sup>2,3</sup>	2
MUSI 377	High Brass Methods <sup>2,3</sup>	2
MUSI 406	Advanced Conducting <sup>2,3</sup>	2
MUSI 407	Choral Rehearsal Techniques <sup>2,3</sup>	1
Subtotal		59
<b>Major Applied - Must all be in the same instrument</b>		
Students must earn a "C" or better in each semester of applied major study. Four credits at the 300+ level are required.		
Select two credits of the following:		2
MUSI 179	Applied Music <sup>2</sup>	
MUSI 181	Applied Voice <sup>2</sup>	
MUSI 182	Applied Strings (Violin, Viola, Cello, Bass) <sup>2</sup>	
MUSI 183	Applied Brass (Trumpet, Horn, Trombone, Tuba, Euphonium) <sup>2</sup>	
MUSI 184	Applied Woodwinds (Oboe, Clarinet, Bassoon, Flute, Saxophone) <sup>2</sup>	
MUSI 185	Applied Percussion <sup>2</sup>	
Select two credits of the following:		2
MUSI 279	Applied Piano <sup>2</sup>	
MUSI 281	Applied Voice <sup>2</sup>	
MUSI 282	Applied Strings (Violin, Viola, Cello, Bass) <sup>2</sup>	
MUSI 283	Applied Brass (Trumpet, Horn, Trombone, Tuba, Euphonium) <sup>2</sup>	
MUSI 284	Applied Woodwinds (Oboe, Clarinet, Bassoon, Flute, Saxophone) <sup>2</sup>	
MUSI 285	Applied Percussion <sup>2</sup>	
Select two credits of the following:		2
MUSI 379	Applied Piano <sup>2</sup>	
MUSI 381	Applied Voice <sup>2</sup>	
MUSI 382	Applied Strings (Violin, Viola, Cello, Bass) <sup>2</sup>	

MUSI 383	Applied Brass (Trumpet, Horn, Trombone, Tuba, Euphonium) <sup>2</sup>	
MUSI 384	Applied Woodwinds (Oboe, Clarinet, Bassoon, Flute, Saxophone) <sup>2</sup>	
MUSI 385	Applied Percussion <sup>2</sup>	
Select one credit of the following:		1
MUSI 479	Applied Piano <sup>2</sup>	
MUSI 481	Applied Voice <sup>2</sup>	
MUSI 482	Applied Strings (Violin, Viola, Cello, Bass) <sup>2</sup>	
MUSI 483	Applied Brass (Trumpet, Horn, Trombone, Tuba, Euphonium) <sup>2</sup>	
MUSI 484	Applied Woodwinds (Oboe, Clarinet, Bassoon, Flute, Saxophone) <sup>2</sup>	
MUSI 485	Applied Percussion <sup>2</sup>	
Subtotal		7
<b>Minor Applied - Instrumental and Voice Majors Only</b>		
Students must earn a "C" or better in each semester of applied major study.		
Select one of the following:		0-4
MUSI 131	Class Piano I	
& MUSI 132	and Class Piano II	
& MUSI 234	and Class Piano III	
& MUSI 235	and Class Piano IV <sup>2,3</sup>	
MUSI 179-479	Applied Piano <sup>2,3</sup>	
Subtotal		0-4
<b>Minor Applied - Piano Majors Only</b>		
Students must earn a "C" or better in each semester of applied major study.		
Select four credits:		0-4
MUSI 181-481	Applied Voice <sup>2</sup>	
MUSI 182-482	Applied Strings (Violin, Viola, Cello, Bass) <sup>2</sup>	
MUSI 183-483	Applied Brass (Trumpet, Horn, Trombone, Tuba, Euphonium) <sup>2</sup>	
MUSI 184-484	Applied Woodwinds (Oboe, Clarinet, Bassoon, Flute, Saxophone) <sup>2</sup>	
MUSI 185-485	Applied Percussion <sup>2</sup>	
Subtotal		0-4
<b>Additional Voice Major Requirements</b>		
Two credits:		0-2
MUSI 299	Diction for Singers <sup>2,3</sup>	
MUSI 399	Diction for Singers II <sup>2,3</sup>	
Subtotal		0-2
<b>Ensemble Participation</b>		
Four semesters must be at the 300+ level. The student must earn a "C" or better in each semester to satisfy the requirement. Students must play in one ensemble every semester up to 7 semesters. See Ensemble Policy below.		
<i>Ensembles</i>		
MUSI 109	Jazz Combo	
MUSI 113	Saxophone Quartet	
MUSI 114	Symphonic Wind Ensemble	
MUSI 115	Concert Choir	
MUSI 116	University Chorus	
MUSI 117	Chamber Singers	

MUSI 118	Marching Pride
MUSI 119	Concert Band
MUSI 120	Jazz Ensemble
MUSI 121	Symphony Orchestra
MUSI 122	Chamber String Ensemble
MUSI 123	Brass Ensemble
MUSI 124	Woodwind Ensemble
MUSI 125	Percussion Ensemble
MUSI 126	Flute Choir
MUSI 192	Tuba-Euphonium Ensemble
MUSI 193	Jazz Lab Band
MUSI 194	World Percussion Ensemble
MUSI 209	Jazz Combo
MUSI 213	Saxophone Quartet
MUSI 214	Symphonic Wind Ensemble
MUSI 215	Concert Choir
MUSI 216	University Chorus
MUSI 217	Chamber Singers
MUSI 218	Marching Pride
MUSI 219	Concert Band
MUSI 220	Jazz Ensemble
MUSI 221	Symphony Orchestra
MUSI 222	Chamber String Ensemble
MUSI 223	Brass Ensemble
MUSI 224	Woodwind Ensemble
MUSI 225	Percussion Ensemble
MUSI 226	Flute Choir
MUSI 233	Chamber Music Performance
MUSI 292	Tuba-Euphonium Ensemble
MUSI 293	Jazz Lab Band
MUSI 294	World Percussion Ensemble
MUSI 309	Jazz Combo
MUSI 313	Saxophone Quartet
MUSI 314	Symphonic Wind Ensemble
MUSI 315	Concert Choir
MUSI 316	University Chorus
MUSI 317	Chamber Singers
MUSI 318	Marching Pride
MUSI 319	Concert Band
MUSI 320	Jazz Ensemble
MUSI 321	Symphony Orchestra
MUSI 322	Chamber String Ensemble
MUSI 323	Brass Ensemble
MUSI 324	Woodwind Ensemble
MUSI 325	Percussion Ensemble
MUSI 326	Flute Choir
MUSI 392	Tuba-Euphonium Ensemble
MUSI 393	Jazz Lab Band
MUSI 394	World Percussion Ensemble
MUSI 409	Jazz Combo
MUSI 413	Saxophone Quartet
MUSI 414	Symphonic Wind Ensemble

MUSI 415	Concert Choir	
MUSI 416	University Chorus	
MUSI 417	Chamber Singers	
MUSI 418	Marching Pride	
MUSI 419	Concert Band	
MUSI 420	Jazz Ensemble	
MUSI 421	Symphony Orchestra	
MUSI 422	Chamber String Ensemble	
MUSI 423	Brass Ensemble	
MUSI 424	Woodwind Ensemble	
MUSI 425	Percussion Ensemble	
MUSI 426	Flute Choir	
MUSI 492	Tuba-Euphonium Ensemble	
MUSI 493	Jazz Lab Band	
MUSI 494	World Percussion Ensemble	
Subtotal		7

**Professional Education**

MUSI 455	Student Teaching - Music <sup>2</sup>	12
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**Total Hours** **87**

<sup>1</sup> Voice majors –exempt from MUSI 133 and MUSI 203  
String majors –exempt from MUSI 203

<sup>2</sup> Course counts for 50% of Major requirements and Major GPA  
<sup>3</sup> Grade of “C” or better required.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**Ensemble Policy**

While students are encouraged to participate in a variety of ensemble experiences, students must participate in at least one ensemble on their primary instrument every semester in which they are enrolled at SRU and taking applied lessons.

Students are required to complete an ensemble placement audition each semester after which ensemble directors, in consultation with applied teachers and advisors, will assign semester ensemble placements. Only once all ensembles have been staffed and no other opportunities exist for a specific primary instrument will participation on a secondary instrument be counted toward this requirement.

In addition, music education students whose primary instrument is voice must play an instrument in an instrumental ensemble for at least one semester and music education students whose primary instrument is anything other than voice must sing in a vocal ensemble for at least one semester.

**Important Information for Music Education Majors**

- Piano Proficiency: Music education students are expected to achieve piano proficiency by the end of Class Piano IV. Applied piano majors will follow the same proficiency schedule as the class piano students. Students will not be permitted to take the methods block or student teach until the proficiency is passed. See guidelines. Piano Majors will select another instrument for their minor applied requirement but still must pass the piano proficiencies.
- Enrollment in one semester of Marching Band (semester I or III) is a prerequisite to Marching Band Techniques.

- Music Education majors have a choice of Instrumental Improvisation or Keyboard Improvisation.
- Students must pre-register for student teaching one year in advance and must be admitted into Teacher Candidacy.
- Six credits of Math (MATH 113 or higher) required prior to admission to Teacher Candidacy
- Intro to Music Education (MUSI 111), Critical Writing (ENGL 102), Critical Reading (ENGL 104), High Incidence Disabilities (SPED 121) and Human Development (CDEV 248) are required for admission to Teacher Candidacy.

## Completed Requirements Checklist

### Requirement Description

- Music Education: Freshman Review
- Music Education: Upper Division Review
- Teacher Candidacy Review
- Musicianship Skills Proficiency
- Musicianship Health Competency: Can be satisfied by passing the eight
- Musicianship Health Competency quizzes with scores of 70% or higher OR by earning a C or better in MUSI 203, Musician's Health.
- Piano Proficiency
- Music Methods Competencies

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership development
5. Career education and development
6. Internships
7. Field Experiences
8. Student Teaching
9. Volunteering (schools, health care facilities, churches, communities)

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MUSIC EDUCATION - BM (5233)

This program is effective as of Fall 2022

Revised 04.27.2023

UCC 01.31.2023

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
Major Applied – 100 level		1
Large Ensemble (major instrument) – 100 level (Arts Inq. I)		1
MUSI 111	Introduction to Music Education	3
MUSI 118 or MUSI 115	Marching Pride (string majors – band) <sup>2</sup> or Concert Choir	1
MUSI 129	Guitar, Ukulele, & Bass Methods	2
MUSI 131	Class Piano I <sup>1</sup>	1
MUSI 151	Music Theory and Analysis I	2
MUSI 154	Musicianship Skills I	1
Select one of the following:		1
MUSI 133	Class Voice I (instrumental majors only)	
MUSI 299	Diction for Singers (voice majors only)	
SUBJ 139	Foundations of Academic Discovery <sup>3</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Major Applied – 100 level		1
Large Ensemble – 100 level (Arts Inquiry 2)		1
MUSI 132	Class Piano II <sup>1</sup>	1
MUSI 140	Low Brass Methods	2
MUSI 253	Music Theory and Analysis II	2
MUSI 256	Musicianship Skills II	1
Select one of the following:		1
MUSI 203	Musician's Health (piano and non-string inst. Majors)	
MUSI 215	Concert Choir (string majors)	
MUSI 399	Diction for Singers II (voice majors only)	
ENGL 102	Critical Writing <sup>4</sup>	3
MATH 117	Quantitative Reasoning	3
SPED 121	Overview of Special Education	3
<b>Hours</b>		<b>18</b>
<b>Second Year</b>		
<b>Fall</b>		
Major Applied – 200 level		1
Large Ensemble – 200 level (Arts Inquiry 3)		1
MUSI 206	Fundamentals of Conducting	1
MUSI 208	Clarinet and Saxophone Methods	2
MUSI 212	Fundamentals of Conducting Lab	1
MUSI 234	Class Piano III <sup>1</sup>	1
MUSI 247	Percussion Methods	2
MUSI 254	Music Theory and Analysis III	2
MUSI 257	Musicianship Skills III	1
MUSI 291	Field Experience in Music 2: Pre-K Experience <sup>9</sup>	1
ENGL 104	Critical Reading <sup>4</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Major Applied – 200 level		1
Major Ensemble – 200 Level		1

MUSI 235	Class Piano IV <sup>1</sup>	1
MUSI 255	Music Theory and Analysis IV	2
MUSI 258	Musicianship Skills IV	1
MUSI 357	Music Education for Diverse Learners	3
MUSI 291	Field Experience in Music 2: Pre-K Experience <sup>9</sup>	1
MUSI 377	High Brass Methods	2
MUSI 406	Advanced Conducting (w/Lab)	2
CDEV 248	Human Development and Education	3
<b>Hours</b>		<b>17</b>

**Third Year****Fall**

Major Applied – 300 level		1
Large Ensemble – 300 level		1
MATH 113	Mathematics as a Liberal Art (or higher)	3
MUSI 304	Orchestral String Methods	2
MUSI 359	History of Music I	3
MUSI 376	Flute, Oboe, & Bassoon Methods <sup>5</sup>	2
SCI 101	Science of Life	3
SEFE 326	ELL Strategies and Practice	3
<b>Hours</b>		<b>18</b>

**Spring**

Major Applied – 300 level		1
Large Ensemble – 300 level		1
MUSI 334	Vocal & Choral Methods (w/Field Experience) <sup>5</sup>	2
MUSI 335	Early Childhood, Elementary, and Secondary General Music Methods (w/Field Experience) <sup>5</sup>	2
MUSI 336	Instrumental Methods (w/Field Experience) <sup>5</sup>	2
MUSI 300	Marching Band Techniques	2
MUSI 353	Music Methods Block Field Experience	1
MUSI 354	Integrated Music Methods Lab	1
MUSI 361	Instrumental Improvisation <sup>8</sup>	1
MUSI 373	History of Music II	3
<b>Hours</b>		<b>16</b>

**Fourth Year****Fall**

Major Applied – 400 level		1
Large Ensemble – 400 level		1
MUSI 337	Instrumental Rehearsal Techniques (w/Field Exp.) <sup>5</sup>	1
MUSI 339	Rehearsal Techniques Field Experience	1
MUSI 360	Keyboard Improvisation <sup>8</sup>	1
MUSI 407	Choral Rehearsal Techniques (w/Field Exp.) <sup>5,6</sup>	1
SCI 102	Understanding the Physical World	3
SEFE 342	Educational Psychology for Diverse Learners	3
Humanities Inquiry (p. 29)		3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	

PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
<b>Hours</b>		<b>18</b>
<b>Spring</b>		
Student Teaching <sup>7</sup>		12
<b>Hours</b>		<b>12</b>
<b>Total Hours**</b>		<b>131</b>

<sup>1</sup> Piano & Skills Proficiencies: Music education students are expected to achieve proficiency by the end of Class Piano IV and Musicianship Skills IV. Applied piano majors will follow the same proficiency schedule as the class piano students. Students will not be permitted to take the methods block or student teach until the proficiencies are passed. See guidelines. **Piano Majors** will select another instrument for their minor applied requirement but still must pass the piano proficiencies.

<sup>2</sup> Enrollment in one semester of Marching Band (semester I or III) is a prerequisite to MUSI 300.

<sup>3</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>4</sup> Six credits of math (MATH 113 or higher), Critical Reading (ENGL 102), Critical Reading (ENGL 104), High Incidence (SPED 121), Intro to Music Education (MUSI 111), and Human Development (CDEV 248) are required for admission to Teacher Candidacy.

<sup>5</sup> Acceptance to Teacher Candidacy is a prerequisite for the following courses: MUSI 339, MUSI 353, MUSI 375, MUSI 455.

<sup>6</sup> Enrollment in one semester of Concert Choir is a prerequisite for Choral Rehearsal Techniques.

<sup>7</sup> Students must pre-register for student teaching one year in advance and must be admitted into Teacher Candidacy.

<sup>8</sup> Students must take either MUSI 360 or MUSI 361.

<sup>9</sup> MUSI 291 may be taken in Second Year, Fall or Spring Semester.

**Music Education Upper-Division Review will be scheduled during Semester IV. Complete requirements for Teacher Candidacy by October 15 or March 15. Field 1 Observation due for Freshman Review AND Field Experience II: Exploration due for Upper Division Review, both of which occur in March or April.**

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

Major Code: 5233

Revised: 05.13.2022

## Music for Education, Minor

The Minor in Music for Education minor is the most flexible of our four minors in music for education at SRU. This minor allows the student to tailor their interest towards developing skills that could be used for volunteer or paid positions with school or community music opportunities, such as serving on marching band staffs, directing or assisting with community musicals or choirs, working in early childhood centers, or leading music for camps.



The minor also allows students majoring in education (elementary, middle-level, secondary, etc.) an opportunity to stack credentials, providing a competitive edge for supplemental teaching opportunities in their local districts.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Music Education Program Page (<https://www.sru.edu/academics/majors-and-minors/music-education/>)

Music Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/music/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Minor GPA: 2.00 or higher

### MINOR REQUIREMENTS

- Students must complete at least 9 credit hours of MUSI in their minor from SRU.
- Students must complete at least 6 credit hours in their minor from SRU.
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above).
- A minor shall be no fewer than 18 credits.
- Students must earn a grade of "C" or higher in all coursework.

Code	Title	Hours
<b>Required Foundations of Music Coursework</b>		
MUSI 151	Music Theory and Analysis I	2
MUSI 154	Musicianship Skills I	1
MUSI 203	Musician's Health	1
MUSI 253	Music Theory and Analysis II	2
MUSI 256	Musicianship Skills II	1
<b>Required Foundations of Music Education Coursework</b>		<b>6</b>
MUSI 111	Introduction to Music Education	
MUSI 357	Music Education for Diverse Learners	
<b>Performance Study</b>		
Select 2 credits from the following:		2
MUSI 131	Class Piano I	
MUSI 132	Class Piano II	
MUSI 133	Class Voice I	
MUSI 134	Voice Methods	
MUSI 137	Functional Guitar for Music Therapy I	
MUSI 138	Functional Guitar for Music Therapy II	
MUSI 179	Applied Music	
MUSI 181	Applied Voice	
MUSI 182	Applied Strings	
MUSI 183	Applied Brass	
MUSI 184	Applied Woodwinds	
MUSI 185	Applied Percussion	
MUSI 234	Class Piano III	

MUSI 235	Class Piano IV	
MUSI 279	Applied Piano	
MUSI 281	Applied Voice	
MUSI 282	Applied Strings	
MUSI 283	Applied Brass	
MUSI 284	Applied Woodwinds	
MUSI 285	Applied Percussion	
<b>Ensembles</b>		
Select 4 credits total, 1 at each level (1XX, 2XX, 3XX, 4XX); 1 credit may come from these Chamber Ensembles		4
MUSI 109-409	Jazz Combo <sup>1</sup>	
MUSI 113-413	Saxophone Quartets <sup>1</sup>	
MUSI 114-414	Symphonic Wind Ensemble	
MUSI 115-415	Concert Choir	
MUSI 116-416	University Choir	
MUSI 117-417	Chamber Singers <sup>1</sup>	
MUSI 118-418	Marching Pride	
MUSI 119-419	Concert Band	
MUSI 120-420	Jazz Ensemble	
MUSI 121-421	Symphony Orchestra	
MUSI 122-422	Chamber String Ensemble <sup>1</sup>	
MUSI 123-423	Brass Ensemble <sup>1</sup>	
MUSI 125-425	Percussion Ensemble <sup>1</sup>	
MUSI 126-426	Flute Choir <sup>1</sup>	
MUSI 192-492	Tuba-Euphonium Ensemble <sup>1</sup>	
MUSI 193-493	Jazz Lab Band <sup>1</sup>	
MUSI 194-494	World Percussion Ensemble <sup>1</sup>	
MUSI 196-496	Winter Guard	
MUSI 233	Chamber Music Performance <sup>1</sup>	
MUSI 237, 437	Opera Performance <sup>1</sup>	
<b>Music Education Electives</b>		
Select 6 credits - at least 4 credits must be at the 300/400 level		6
MUSI 129	Guitar, Ukulele, & Bass Methods	
MUSI 140	Low Brass Methods	
MUSI 204	Art and Science of Performing	
MUSI 206	Fundamentals of Conducting	
MUSI 208	Clarinet and Saxophone Methods	
MUSI 212	Fundamentals of Conducting Lab	
MUSI 247	Percussion Methods	
MUSI 291	Field Experience in Music 2: Pre-K Experience	
MUSI 300	Marching Band Techniques	
MUSI 304	Orchestral String Methods	
MUSI 334	Vocal & Choral Methods	
MUSI 335	Early Childhood, Elementary, and Secondary General Music Methods	
MUSI 336	Instrumental Methods	
MUSI 337	Instrumental Rehearsal Techniques	
MUSI 354	Integrated Music Methods Lab	
MUSI 376	Flute, Oboe, & Bassoon Methods	
MUSI 377	High Brass Methods	
MUSI 406	Advanced Conducting	

MUSI 407	Choral Rehearsal Techniques
<b>Total Hours</b>	<b>25</b>

<sup>1</sup> Ensembles requirement must include 4 credits, 1 credit at each level (1XX, 2XX, 3XX, 4XX). Only 1 credit may come from Chamber Ensembles.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN MUSIC FOR EDUCATION (56B)

Effective: Fall 2022

Revised 03.31.2022

UCC 10.05.2021

# Music for Education: Early Childhood, Minor

The Minor in Music for Education: Early Childhood minor is designed to support students interested in developing their skills at using music with young children. The minor includes studies in music performance and teaching, including a field experience with preK music.

The minor also allows students majoring in Early Childhood Education an opportunity to stack credentials, providing a competitive edge in the job market.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Music Education Program Page (<https://www.sru.edu/academics/majors-and-minors/music-education/>)

Music Department Page (<https://www.sru.edu/academics/colleges-and-departments/cda/departments/music/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Minor GPA: 2.00 or higher

### MINOR REQUIREMENTS

- Students must complete at least 9 credit hours of MUSI in their minor from SRU.

- Students must complete at least 6 credit hours in their minor from SRU.
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above).
- A minor shall be no fewer than 18 credits.
- Students must earn a grade of "C" or higher in all coursework.

Code	Title	Hours
<b>Required Foundations of Music Coursework</b>		
MUSI 151	Music Theory and Analysis I	2
MUSI 154	Musicianship Skills I	1
MUSI 203	Musician's Health	1
MUSI 253	Music Theory and Analysis II	2
MUSI 256	Musicianship Skills II	1
<b>Required Foundations of Music Education Coursework</b>		<b>9</b>
MUSI 111	Introduction to Music Education	
MUSI 291	Field Experience in Music 2: Pre-K Experience	
MUSI 335	Early Childhood, Elementary, and Secondary General Music Methods	
MUSI 357	Music Education for Diverse Learners	
<b>Performance Study</b>		
Select 2 credits from the following:		2
MUSI 131	Class Piano I	
MUSI 132	Class Piano II	
MUSI 133	Class Voice I	
MUSI 134	Voice Methods	
MUSI 137	Functional Guitar for Music Therapy I	
MUSI 138	Functional Guitar for Music Therapy II	
MUSI 179	Applied Music	
MUSI 181	Applied Voice	
MUSI 182	Applied Strings	
MUSI 183	Applied Brass	
MUSI 184	Applied Woodwinds	
MUSI 185	Applied Percussion	
MUSI 234	Class Piano III	
MUSI 235	Class Piano IV	
MUSI 279	Applied Piano	
MUSI 281	Applied Voice	
MUSI 282	Applied Strings	
MUSI 283	Applied Brass	
MUSI 284	Applied Woodwinds	
MUSI 285	Applied Percussion	
<b>Ensembles</b>		
Select 4 credits total, 1 at each level (1XX, 2XX, 3XX, 4XX); 1 credit may come from these Chamber Ensembles		4
MUSI 109-409	Jazz Combo <sup>1</sup>	
MUSI 113-413	Saxophone Quartets <sup>1</sup>	
MUSI 114-414	Symphonic Wind Ensemble	
MUSI 115-415	Concert Choir	
MUSI 116-416	University Choir	
MUSI 117-417	Chamber Singers <sup>1</sup>	
MUSI 118-418	Marching Pride	

MUSI 119-419	Concert Band
MUSI 120-420	Jazz Ensemble
MUSI 121-421	Symphony Orchestra
MUSI 122-422	Chamber String Ensemble <sup>1</sup>
MUSI 123-423	Brass Ensemble <sup>1</sup>
MUSI 125-425	Percussion Ensemble <sup>1</sup>
MUSI 126-426	Flute Choir <sup>1</sup>
MUSI 192-492	Tuba-Euphonium Ensemble <sup>1</sup>
MUSI 193-493	Jazz Lab Band <sup>1</sup>
MUSI 194-494	World Percussion Ensemble <sup>1</sup>
MUSI 196-496	Winter Guard <sup>1</sup>
MUSI 233	Chamber Music Performance <sup>1</sup>
MUSI 237, 437	Opera Performance <sup>1</sup>

#### Music Education Electives

Select 3 credits to reach 25 total credits for minor - at least 2 credits must be at the 300/400 level 3

MUSI 129	Guitar, Ukulele, & Bass Methods
MUSI 204	Art and Science of Performing
MUSI 206	Fundamentals of Conducting
MUSI 212	Fundamentals of Conducting Lab
MUSI 247	Percussion Methods
MUSI 334	Vocal & Choral Methods
MUSI 406	Advanced Conducting

**Total Hours** 25

<sup>1</sup> Ensembles requirement must include 4 credits, 1 credit at each level (1XX, 2XX, 3XX, 4XX). Only 1 credit may come from Chamber Ensembles.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN MUSIC FOR EDUCATION: EARLY CHILDHOOD (56D)

Effective: Fall 2022

Revised 03.31.2022

UCC 10.05.2021

## Music for Education: Marching Arts, Minor

The Minor in Music for Education: Marching Arts minor is designed to support students interested in the marching arts (marching band, winter guard, indoor drumline, etc.) and to provide a competitive edge in the form of a credential for those interested in working with ensembles

professionally or as volunteers. The flexible minor allows the student to tailor their interest towards developing skills in drill writing, movement fundamentals, marching band pedagogy, winter guard, color guard, and teaching woodwinds, brass, and/or percussion.

The minor also allows students majoring in education (elementary, middle-level, secondary, etc.) an opportunity to stack credentials, providing a competitive edge for supplemental teaching opportunities in their local districts.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Music Education Program page (<https://www.sru.edu/academics/majors-and-minors/music-education/>)

Music Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/music/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Minor GPA: 2.00 or higher

### MINOR REQUIREMENTS

- Students must complete at least 9 credit hours of MUSI in their minor from SRU.
- Students must complete at least 6 credit hours in their minor from SRU.
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above).
- A minor shall be no fewer than 18 credits.
- Students must earn a grade of "C" or higher in all coursework.

Code	Title	Hours
<b>Required Foundations of Music Coursework</b>		
MUSI 151	Music Theory and Analysis I	2
MUSI 154	Musicianship Skills I	1
MUSI 203	Musician's Health	1
MUSI 204	Art and Science of Performing	1
MUSI 253	Music Theory and Analysis II	2
MUSI 256	Musicianship Skills II	1
<b>Required Foundations of Music Education Coursework</b>		<b>8</b>
MUSI 111	Introduction to Music Education	
MUSI 300	Marching Band Techniques	
MUSI 357	Music Education for Diverse Learners	
<b>Performance Study</b>		
Select 2 credits from the following:		2
MUSI 131	Class Piano I	
MUSI 132	Class Piano II	
MUSI 133	Class Voice I	
MUSI 134	Voice Methods	
MUSI 137	Functional Guitar for Music Therapy I	
MUSI 138	Functional Guitar for Music Therapy II	
MUSI 179	Applied Music	

MUSI 181	Applied Voice
MUSI 182	Applied Strings
MUSI 183	Applied Brass
MUSI 184	Applied Woodwinds
MUSI 185	Applied Percussion
MUSI 234	Class Piano III
MUSI 235	Class Piano IV
MUSI 279	Applied Piano
MUSI 281	Applied Voice
MUSI 282	Applied Strings
MUSI 283	Applied Brass
MUSI 284	Applied Woodwinds
MUSI 285	Applied Percussion

**Ensembles**

Select 4 credits total, 1 at each level (1XX, 2XX, 3XX, 4XX) 4

MUSI 118-418	Marching Pride
MUSI 196-496	Winter Guard

**Music Education Electives**

Select 3 credits to reach 25 total credits for this minor - at least 2 credits must be at the 300/400 level 3

MUSI 140	Low Brass Methods
MUSI 206	Fundamentals of Conducting
MUSI 208	Clarinet and Saxophone Methods
MUSI 212	Fundamentals of Conducting Lab
MUSI 247	Percussion Methods
MUSI 336	Instrumental Methods
MUSI 337	Instrumental Rehearsal Techniques
MUSI 376	Flute, Oboe, & Bassoon Methods
MUSI 377	High Brass Methods
MUSI 406	Advanced Conducting

**Total Hours** 25

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**Important Curriculum Guide Notes**

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN MUSIC FOR EDUCATION: MARCHING ARTS (56C)

Effective: Fall 2022

Revised 03.31.2022

UCC 10.05.2021

## Music for Education: Vocal Music, Minor

The Minor in Music for Education: Vocal Music minor is designed to support students who enjoy singing and to provide a competitive edge in the form of a credential for those interested in working with vocal music professionally or as volunteers. The flexible minor allows the student to tailor their interest towards developing skills in performance, conducting, and vocal and choral methods.

The minor also allows students majoring in education (elementary, middle-level, secondary, etc.) an opportunity to stack credentials, providing a competitive edge for supplemental teaching opportunities in their local districts.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Music Education Program Page (<https://www.sru.edu/academics/majors-and-minors/music-education/>)

Music Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/music/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Minor GPA: 2.00 or higher

### MINOR REQUIREMENTS

- Students must complete at least 9 credit hours of MUSI in their minor from SRU.
- Students must complete at least 6 credit hours in their minor from SRU.
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above).
- A minor shall be no fewer than 18 credits.
- Students must earn a grade of "C" or higher in all coursework.

Code	Title	Hours
<b>Required Foundations of Music Coursework</b>		
MUSI 151	Music Theory and Analysis I	2
MUSI 154	Musicianship Skills I	1
MUSI 203	Musician's Health	1
MUSI 253	Music Theory and Analysis II	2
MUSI 256	Musicianship Skills II	1
<b>Required Foundations of Music Education Coursework</b>		<b>8</b>
MUSI 111	Introduction to Music Education	
MUSI 334	Vocal & Choral Methods	
MUSI 357	Music Education for Diverse Learners	
<b>Performance Study</b>		
<i>Select 2 credits from the following:</i>		<b>2</b>
MUSI 131	Class Piano I	
MUSI 132	Class Piano II	
MUSI 133	Class Voice I	

MUSI 134	Voice Methods
MUSI 179	Applied Music
MUSI 181	Applied Voice
MUSI 234	Class Piano III
MUSI 235	Class Piano IV
MUSI 279	Applied Piano
MUSI 281	Applied Voice

**Ensembles**

Select 4 credits total, 1 at each level (1XX, 2XX, 3XX, 4XX) 4

MUSI 115-415	Concert Choir
MUSI 116-416	University Choir
MUSI 117-417	Chamber Singers
MUSI 237, 437	Opera Performance

**Music Education Electives**

Select 4 credits to reach 25 total credits in minor - at least 2 credits must be at the 300/400 level 4

MUSI 204	Art and Science of Performing
MUSI 206	Fundamentals of Conducting
MUSI 212	Fundamentals of Conducting Lab
MUSI 335	Early Childhood, Elementary, and Secondary General Music Methods
MUSI 406	Advanced Conducting
MUSI 407	Choral Rehearsal Techniques

**Total Hours** 25

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**Important Curriculum Guide Notes**

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN MUSIC FOR EDUCATION: VOCAL MUSIC (56E)

Effective: Fall 2022

Revised 03.31.2022

UCC 10.05.2021

**Music History, Minor****18 Credit Hours**

The Minor in Music History is designed for the student interested in exploring music history through required and elective music courses as well as musical literature through ensemble performance.

To access Minor Requirements, please view the Curriculum Guide tab.

**Related Links**

Music Education Program Page (<https://www.sru.edu/academics/majors-and-minors/music-education/>)

Music Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/music/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

**CURRICULUM GUIDE****GPA REQUIREMENT**

Minor GPA: 2.00 or higher

**MINOR REQUIREMENTS**

- Students must complete at least 9 credit hours of MUSIC in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Foundational Course</b>		
MUSI 130	Exploring Music	3

**Music Literature**

Select 3 credits of ensemble study to include 1 at each level (1XX, 2XX, 3XX) OR one 3-credit course from MUSI 276 or 278 3

MUSI 109-409	Jazz Combo
MUSI 113-413	Saxophone Quartets
MUSI 114-414	Symphonic Wind Ensemble
MUSI 115-415	Concert Choir
MUSI 116-416	University Choir
MUSI 117-417	Chambers Singers
MUSI 118-418	Marching Pride
MUSI 119-419	Concert Band
MUSI 120-420	Jazz Ensemble
MUSI 121-421	Symphony Orchestra
MUSI 122-422	Chamber String Ensemble
MUSI 123-423	Brass Ensemble
MUSI 125-425	Percussion Ensemble
MUSI 126-426	Flute Choir
MUSI 192-492	Tuba-Euphonium Ensemble
MUSI 193-493	Jazz Lab Band
MUSI 194-494	World Percussion Ensemble
MUSI 196-496	Winter Guard
MUSI 233	Chamber Music Performance
MUSI 237-437	Opera Performance
MUSI 276	Songs & Singers
MUSI 278	Literature of the American Musical Theater

**Electives**

Select 12 credits of the following with 6 credits at 300/400 level 12

MUSI 102	Exploring World Music
MUSI 104	Exploring American Music
MUSI 105	Exploring Jazz



MUSI 276	Songs & Singers
MUSI 278	Literature of the American Musical Theater
MUSI 301	Women and Music
MUSI 359	History of Music I
MUSI 373	History of Music II

**Total Hours** 18

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN MUSIC HISTORY (56G)

Revised 07.28.21

UCC 04.13.2021

# Music Performance, Bachelor of Music (BM)

The Bachelor of Music in Music Performance prepares students to develop the highest level of performing skills. For more information on the BM in Music Performance, please contact Dr. Jason Kush.

For information regarding auditions for the Music Department, please click here (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/music/auditions/>).

## Program Learning Outcomes

- The student will be able to identify and analyze the basic elements of music both visually and aurally including analyzing musical compositions focusing on theoretical and historical aspects. (UO: 2,6)
- The student will be able to identify, explain and appreciate music of different historical periods, cultures, and composers. (UO: 2,6,9)
- The student will be able to use critical thinking skills and communicate effectively in oral, written, and electronic mode. (UO: 1,2,10)
- The student will be able to harmonize, transpose, compose, arrange, and orchestrate music utilizing concepts of the basic elements of music as well as instrumental and vocal characteristics. (UO: 2,6)
- The student will be able to demonstrate basic conducting patterns, techniques, expressions, and rehearsal techniques with vocal and instrumental ensembles. (UO: 2,6)
- The student will be able to understand and appreciate the creative process of the arts by exploring creative ways to express feelings, perform music, and select resources and procedures for instruction/therapy with their students/clients. (UO: 2,6,7,8,9)

- The student will be able to play scales, accompaniments, song repertoire, songs by ear, and transpose melodies with harmonization on the guitar. (UO: 2,6)
- The student will be able to explain and identify jazz concepts and styles and perform clinical instrumental improvisation techniques. (UO: 1,2,6)
- The student will be able to perform as a member of a musical ensemble demonstrating proper techniques of ensemble performance such as balance and blend, as well as musical and social interaction, and cooperation to achieve shared goals. (UO: 2,5,6,7,8,9)
- The student will be able to play scales, repertoire, hymns, music therapy literature, accompaniments, songs by ear, and transposed melodies with harmonization on the piano. (UO: 2,6)
- The student will be able to sing or play his/her primary instrument with appropriate techniques of posture, breathing, tone production, articulation/bowing, diction, intonation, expression, and style. (UO: 2,6)
- The student will be able to demonstrate knowledge of instrumental/vocal repertoire by performing music of different styles, periods, and composers. (UO: 1,2,6)
- The student will perform in a student recital or performance class every semester. (UO: 1,2,5,6,7)
- The student will be able to identify instrumental/vocal strengths and weaknesses. (UO: 1,2,5,6)
- The student will be able to use technology in composition, performance, analysis, teaching and research. (UO: 2,6,10)

## Related Links

Music Performance, BM Program Page (<https://www.sru.edu/academics/majors-and-minors/music-performance/>)

Music Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/music/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Modern Language Proficiency (Voice Majors Only)	0-6
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	78

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select one of the following:		3
MUSI 114-414	Symphonic Wind Ensemble	
MUSI 115-415	Concert Choir	
MUSI 116-416	University Choir	
MUSI 118-418	Marching Pride	
MUSI 119-419	Concert Band	
MUSI 121-421	Symphony Orchestra	
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Modern Language Proficiency: Voice Majors Only

Language proficiency at the 102 class level is required in French, German or Italian. Exemption by placement or examination is possible

Code	Title	Hours
Complete 0-6 credits		0-6
<b>Total Hours</b>		<b>0-6</b>

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 39 major credits must be taken at SRU or PASSHE
- 39 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Music Courses</b>		
Students must earn a 'C' or better in each semester of Musicianship Skills and Music Theory		
MUSI 151	Music Theory and Analysis I <sup>1,2</sup>	2
MUSI 154	Musicianship Skills I <sup>1,2</sup>	1
MUSI 203	Musician's Health	1
MUSI 204	Art and Science of Performing	1
MUSI 206	Fundamentals of Conducting <sup>1</sup>	1
MUSI 253	Music Theory and Analysis II <sup>1,2</sup>	2
MUSI 254	Music Theory and Analysis III <sup>1,2</sup>	2
MUSI 255	Music Theory and Analysis IV <sup>1,2</sup>	2
MUSI 256	Musicianship Skills II <sup>1,2</sup>	1
MUSI 257	Musicianship Skills III <sup>1,2</sup>	1
MUSI 258	Musicianship Skills IV <sup>1,2</sup>	1
MUSI 350	Computer Technology in Music <sup>1</sup>	2
MUSI 351	Arranging & Orchestration <sup>1</sup>	2
MUSI 359	History of Music I <sup>1</sup>	3
Select one of the following:		1
MUSI 360	Keyboard Improvisation <sup>1</sup>	
MUSI 361	Instrumental Improvisation <sup>1</sup>	

MUSI 373	History of Music II <sup>1</sup>	3
MUSI 406	Advanced Conducting	2
MUSI 431	Pedagogy <sup>1</sup>	1
MUSI 473	History of Popular Musics <sup>1</sup>	3
Subtotal		32

**Major Applied - Must all be in same instrument.**

Students must earn a "C" or better in each semester of applied major study.

Select Four semesters at the 300+ level or higher (required): 24

MUSI 165-465	Applied Performance Voice <sup>1,2</sup>	
MUSI 166-466	Applied Performance Piano <sup>1,2</sup>	
MUSI 167-467	Applied Performance Strings (Violin, Viola, Cello, Bass) <sup>1,2</sup>	
MUSI 168-468	Applied Performance Woodwinds (Flute, Oboe, Clarinet, Saxophone, Bassoon) <sup>1,2</sup>	
MUSI 169-469	Applied Performance Brass (Trumpet, Horn, Trombone, Euphonium, Tuba) <sup>1,2</sup>	
MUSI 170-470	Applied Performance Percussion <sup>1,2</sup>	
Subtotal		24

**Minor Applied Courses**

Select one of the following based on instrument: 4

*Instrumental and Voice Majors Only*

Class Piano can be counted toward the minor applied. Students must earn a 'C' or better each semester to move on to the next level.

Select one of the following:

MUSI 131 & MUSI 132 & MUSI 234 & MUSI 235	Class Piano I and Class Piano II and Class Piano III and Class Piano IV <sup>1,2</sup>	
MUSI 179-479	Applied Piano <sup>1,2</sup>	

*Piano Majors Only*

Class Piano cannot be counted toward the minor applied. Piano majors must select another instrument. Students must earn a 'C' or better each semester to move on to the next level.

Select four credits:

MUSI 181-481	Applied Voice <sup>2</sup>	
MUSI 182-482	Applied Strings (Violin, Viola, Cello, Bass) <sup>2</sup>	
MUSI 183-483	Applied Brass (Trumpet, Horn, Trombone, Tuba, Euphonium) <sup>2</sup>	
MUSI 184-484	Applied Woodwinds (Oboe, Clarinet, Bassoon, Flute, Saxophone) <sup>2</sup>	
MUSI 185-485	Applied Percussion <sup>2</sup>	
Subtotal		4

**Ensemble Participation**

Four semesters must be at the 300+ level. The student must earn a "C" or better in each semester to satisfy the requirement. Students must play in one ensemble every semester up to 8 semesters. See Ensemble Policy below.

*Ensembles:*

MUSI 109	Jazz Combo
MUSI 113	Saxophone Quartet
MUSI 114	Symphonic Wind Ensemble
MUSI 115	Concert Choir
MUSI 116	University Chorus

MUSI 117	Chamber Singers
MUSI 118	Marching Pride
MUSI 119	Concert Band
MUSI 120	Jazz Ensemble
MUSI 121	Symphony Orchestra
MUSI 122	Chamber String Ensemble
MUSI 123	Brass Ensemble
MUSI 124	Woodwind Ensemble
MUSI 125	Percussion Ensemble
MUSI 126	Flute Choir
MUSI 192	Tuba-Euphonium Ensemble
MUSI 193	Jazz Lab Band
MUSI 194	World Percussion Ensemble
MUSI 209	Jazz Combo
MUSI 213	Saxophone Quartet
MUSI 214	Symphonic Wind Ensemble
MUSI 215	Concert Choir
MUSI 216	University Chorus
MUSI 217	Chamber Singers
MUSI 218	Marching Pride
MUSI 219	Concert Band
MUSI 220	Jazz Ensemble
MUSI 221	Symphony Orchestra
MUSI 222	Chamber String Ensemble
MUSI 223	Brass Ensemble
MUSI 224	Woodwind Ensemble
MUSI 225	Percussion Ensemble
MUSI 226	Flute Choir
MUSI 292	Tuba-Euphonium Ensemble
MUSI 293	Jazz Lab Band
MUSI 294	World Percussion Ensemble
MUSI 309	Jazz Combo
MUSI 313	Saxophone Quartet
MUSI 314	Symphonic Wind Ensemble
MUSI 315	Concert Choir
MUSI 316	University Chorus
MUSI 317	Chamber Singers
MUSI 318	Marching Pride
MUSI 319	Concert Band
MUSI 320	Jazz Ensemble
MUSI 321	Symphony Orchestra
MUSI 322	Chamber String Ensemble
MUSI 323	Brass Ensemble
MUSI 324	Woodwind Ensemble
MUSI 325	Percussion Ensemble
MUSI 326	Flute Choir
MUSI 392	Tuba-Euphonium Ensemble
MUSI 393	Jazz Lab Band
MUSI 394	World Percussion Ensemble
MUSI 409	Jazz Combo
MUSI 413	Saxophone Quartet
MUSI 414	Symphonic Wind Ensemble

MUSI 415	Concert Choir	
MUSI 416	University Chorus	
MUSI 417	Chamber Singers	
MUSI 418	Marching Pride	
MUSI 419	Concert Band	
MUSI 420	Jazz Ensemble	
MUSI 421	Symphony Orchestra	
MUSI 422	Chamber String Ensemble	
MUSI 423	Brass Ensemble	
MUSI 424	Woodwind Ensemble	
MUSI 425	Percussion Ensemble	
MUSI 426	Flute Choir	
MUSI 492	Tuba-Euphonium Ensemble	
MUSI 493	Jazz Lab Band	
MUSI 494	World Percussion Ensemble	
Subtotal		8

### Music Electives

Voice Majors must take the following two courses in addition to 8 credits from the electives listed below:

#### Required Music Electives - Voice Majors Only

MUSI 299	Diction for Singers	
MUSI 399	Diction for Singers II	

All performance majors select twelve credits, Voice majors select eight credits; six credits must be at the 300 level or higher.

MUSI 109-409	Jazz Combo <sup>1</sup>	
MUSI 113-413	Saxophone Quartet <sup>1</sup>	
MUSI 114-414	Wind Ensemble <sup>1</sup>	
MUSI 115-415	Concert Choir <sup>1</sup>	
MUSI 117-417	Chamber Singers <sup>1</sup>	
MUSI 118-418	Marching Pride <sup>1</sup>	
MUSI 119-419	Concert Band <sup>1</sup>	
MUSI 121-421	Orchestra <sup>1</sup>	
MUSI 122-422	Chamber Strings <sup>1</sup>	
MUSI 123-423	Brass Ensemble <sup>1</sup>	
MUSI 126-426	Flute Choir <sup>1</sup>	
MUSI 129	Guitar, Ukulele, & Bass Methods <sup>1</sup>	
MUSI 133	Class Voice I (Instrumental majors only) <sup>1</sup>	
MUSI 134	Voice Methods <sup>1</sup>	
MUSI 137	Functional Guitar for Music Therapy I <sup>1</sup>	
MUSI 138	Functional Guitar for Music Therapy II <sup>1</sup>	
MUSI 140	Low Brass Methods <sup>1</sup>	
MUSI 179-479	Applied Piano <sup>1,2</sup>	
MUSI 181-481	Applied Voice <sup>1</sup>	
MUSI 182-482	Applied Strings (Violin, Viola, Cello, Bass) <sup>1</sup>	
MUSI 183-483	Applied Brass (Trumpet, Horn, Trombone, Euphonium, Tuba) <sup>1</sup>	
MUSI 184-484	Applied Woodwinds (Flute, Oboe, Clarinet, Saxophone, Bassoon) <sup>1</sup>	
MUSI 185-485	Applied Percussion <sup>1</sup>	
MUSI 208	Clarinet and Saxophone Methods <sup>1</sup>	
MUSI 233	Chamber Music Performance <sup>1</sup>	
MUSI 237	Opera Performance <sup>1</sup>	
or MUSI 437	Opera Performance	

MUSI 247	Percussion Methods <sup>1</sup>	
MUSI 301	Women and Music <sup>1</sup>	
MUSI 304	Orchestral String Methods <sup>1</sup>	
MUSI 360	Keyboard Improvisation <sup>1</sup>	
or MUSI 361	Instrumental Improvisation	
MUSI 376	Flute, Oboe, & Bassoon Methods <sup>1</sup>	
MUSI 377	High Brass Methods <sup>1</sup>	
Subtotal		12
<b>Applied Recital</b>		
MUSI 499	Applied Recital <sup>1</sup>	1
<b>Total Hours</b>		<b>81</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> Grade of "C" or better required.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Ensemble Policy

While students are encouraged to participate in a variety of ensemble experiences, students must participate in at least one ensemble on their primary instrument every semester in which they are enrolled at SRU and taking applied lessons.

Students are required to complete an ensemble placement audition each semester after which ensemble directors, in consultation with applied teachers and advisors, will assign semester ensemble placements. Only once all ensembles have been staffed and no other opportunities exist for a specific primary instrument will participation on a secondary instrument be counted toward this requirement.

In addition, music education students whose primary instrument is voice must play an instrument in an instrumental ensemble for at least one semester and music education students whose primary instrument is anything other than voice must sing in a vocal ensemble for at least one semester.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership development
5. Career education and development
6. Internships
7. Field Experiences
8. Student Teaching
9. Volunteering (schools, health care facilities, churches, communities)

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum

categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MUSIC PERFORMANCE - BM (5253)

This program is effective as of Spring 2023

Revised 12.19.2022

UCC 11.29.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
Major Applied –100 level		3
Minor Applied (Class Piano I)		1
Large Ensemble (major instrument) –100 level (Arts Inq. I)		1
MUSI 151	Music Theory and Analysis I	2
MUSI 154	Musicianship Skills I	1
MUSI 204	Art and Science of Performing	1
Integrated Inquiry/Thread (voice majors take foreign language) <sup>2,3</sup>		3
SUBJ 139	Foundations of Academic Discovery <sup>4</sup>	3
Voice Majors - Select the following course:		1-2
MUSI 299	Diction for Singers (voice majors only) <sup>1</sup>	
<b>Hours</b>		<b>16-17</b>
<b>Spring</b>		
Major Applied –100 level		3
Minor Applied (Class Piano II)		1
Large Ensemble –100 level (Arts Inquiry 2)		1
MUSI 253	Music Theory and Analysis II	2
MUSI 256	Musicianship Skills II	1
Music Electives (voice majors take MUSI 399)		1-2
Integrated Inquiry/Thread (voice majors take foreign language) <sup>2,3</sup>		3
MUSI 203	Musician's Health (piano and non-string inst. Majors)	1
MATH 117	Quantitative Reasoning	3
<b>Hours</b>		<b>16-17</b>
<b>Second Year</b>		
<b>Fall</b>		
Major Applied –200 level		3
Minor Applied (Class Piano III)		1
Large Ensemble –200 level (Arts Inquiry 3)		1
MUSI 206	Fundamentals of Conducting	1
MUSI 212	Fundamentals of Conducting Lab	1
MUSI 254	Music Theory and Analysis III	2
MUSI 257	Musicianship Skills III	1
ENGL 102	Critical Writing	3
Integrated Inquiry/Thread		3
Declare a Thematic Thread <sup>6</sup>		
<b>Hours</b>		<b>16</b>

### Spring

Major Applied –200 level		3
Minor Applied (Class Piano IV)		1
Large Ensemble –200 Level		1
MUSI 255	Music Theory and Analysis IV	2
MUSI 258	Musicianship Skills IV	1
MUSI 406	Advanced Conducting (w/Lab)	2
Music Electives		2
ENGL 104	Critical Reading	3

**Advanced Standing Review scheduled at the completion of 60 credits**

<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
Major Applied –300 level		3
Large Ensemble –300 level		1
MUSI 359	History of Music I	3
Music Electives <sup>5</sup>		2
MUSI 350	Computer Technology in Music	2
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Integrated Inquiry/Thread		3
<b>Hours</b>		<b>17</b>

### Spring

Major Applied –300 level		3
Large Ensemble –300 level		1
MUSI 351	Arranging & Orchestration	2
Select one of the following this semester or fall semester:		1
MUSI 361	Instrumental Improvisation <sup>3</sup>	
MUSI 360	Keyboard Improvisation <sup>3</sup>	
MUSI 373	History of Music II	3
Music Electives		2
Thread		3
<b>Hours</b>		<b>15</b>

### Fourth Year

<b>Fall</b>		
Major Applied –400 level		3
Large Ensemble –400 level		1
MUSI 473	History of Popular Musics	3
MUSI 431	Pedagogy	1
Music Electives <sup>5</sup>		2
Thread		3
<b>Hours</b>		<b>13</b>

### Spring

Major Applied –400 level		3
Large Ensemble –400 level		1
Applied Recital		1
Music Electives <sup>5</sup>		2



Thread	6
Hours	13
Total Hours**	121-123

- 1 Voice majors must take Diction I and II. These classes will be offered on a rotational basis. If you begin your program in an even year you will take these classes in your freshmen year. If you begin your program in an odd year you will take them in your sophomore year.
- 2 Voice majors must pass the 102 level of Italian, French or German;
- 3 BM majors have a choice of Keyboard Improvisation or Instrumental Improvisation.
- 4 Course offered in multiple subjects; cannot take course in first major subject
- 5 See BM Progress Sheet for additional information on 300+ level requirement
- 6 Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

Major Code: 5253

Revised: 03.2021

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

## Music Therapy, Bachelor of Music (BM)

For information regarding auditions for the Music Department, please click here (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/music/auditions/>).

### Apply Now

To learn more about how to apply to the SRU Music Therapy Program, click here (<https://www.sru.edu/documents/academics/departments/music/How-to-Apply-SRU-MT.pdf>).

### About Our Program

The SRU Music Therapy Program celebrated 40 years of music therapy in 2017 with the founder of the SRU MT Program, Dr. Sue Shuttleworth, and the Director of Music Therapy, Dr. Susan Hadley providing remarks about the strong history of our program. We have three full-time music therapy faculty teaching in the program as well as an on-campus clinic to train music therapy students throughout their studies at SRU.

The Bachelor of Music in Music Therapy prepares students to engage in musical experiences with a diverse range of people to assist them in reaching optimal health and personal growth. For additional information about our music therapy program, contact the music therapy faculty members:

- Susan Hadley, Ph.D., MT-BC (Director of Music Therapy & Coordinator of Graduate Music Therapy Program)
- Nicole Hahna, Ph.D., MT-BC, Fellow of the Association for Music & Imagery (Coordinator of Undergraduate Music Therapy Program)

- Vern Miller, MMT, MT-BC (Coordinator of Clinical Placements & Coordinator of Equivalency Program)

### Certification & Licensure

SRU's Music Therapy Program is approved by the American Music Therapy Association. Students completing this program are eligible to sit for the national board certification exam (<http://www.cbmt.org/>) to obtain the Music Therapist-Board Certified (MT-BC) credential. Pennsylvania does not require state licensing; however, some states do require licensing for music therapists. If you are interested in practicing in another state, please contact the licensing board in that state.

### Our Clinic

Check out this video on our music therapy program: <https://www.youtube.com/watch?v=v2kG-qEXYh4#action=share> (<https://www.youtube.com/watch/?v=v2kG-qEXYh4#action=share>)

### Our Students

Our SRU music therapy students experience many opportunities for clinical work, music therapy research, and collaboration with the music therapy faculty. Here is a video featuring one of our students: <https://www.youtube.com/watch?v=jwCe0cClRys> (<https://www.youtube.com/watch/?v=jwCe0cClRys>)

### SRU Music Therapy Success Story

Learn more about SRU's Music Therapy Program from a student's perspective here (<https://youtu.be/jwCe0cClRys/>).

### Program Learning Outcomes

- The student will be able to identify and analyze the basic elements of music both visually and aurally including analyzing musical compositions focusing on theoretical and historical aspects. (UO: 2,6)
- The student will be able to identify, explain and appreciate music of different historical periods, cultures, and composers. (UO: 1,2,6,9)
- The student will be able to use critical thinking skills and communicate effectively in oral, written, and electronic mode. (UO: 1,2,6,10)
- The student will be able to harmonize, transpose, compose, arrange, and orchestrate music utilizing concepts of the basic elements of music as well as instrumental and vocal characteristics. (UO: 2,6)
- The student will be able to demonstrate basic conducting patterns, techniques, expressions, and rehearsal techniques with vocal and instrumental ensembles. (UO: 2,6)
- The student will be able to understand and appreciate the creative process of the arts by exploring creative ways to express feelings, perform music, and select resources and procedures for instruction/therapy with their students/clients. (UO: 2,6,7,8,9)
- The student will be able to play scales, accompaniments, song repertoire, songs by ear, and transpose melodies with harmonization on the guitar. (UO: 2,6)
- The student will be able to explain and identify jazz concepts and styles and perform clinical instrumental improvisation techniques. (UO: 1,2,6)
- The student will be able to perform as a member of a musical ensemble demonstrating proper techniques of ensemble performance such as balance and blend, as well as musical and social interaction, and cooperation to achieve shared goals. (UO: 2,5,6,7,8,9)

- The student will be able to play scales, repertoire, hymns, music therapy literature, accompaniments, songs by ear, and transposed melodies with harmonization on the piano. (UO: 2,6)
- The student will be able to sing or play his/her primary instrument with appropriate techniques of posture, breathing, tone production, articulation/bowing, diction, intonation, expression, and style. (UO: 2,6)
- The student will be able to demonstrate knowledge of instrumental/vocal repertoire by performing music of different styles, periods, and composers. (UO: 2,6)
- The student will perform in a student recital or performance class every semester. (UO: 1,2,5,6,7)
- The student will be able to identify instrumental/vocal strengths and weaknesses. (UO: 1,2,5,6)
- The student will be able to use technology in composition, performance, analysis, teaching and research. (UO: 2,6,10)
- The student will demonstrate knowledge, skills, and/or abilities in clinical foundations in the areas of exceptionality, principles of therapy, and the therapeutic relationship. (UO: 1,2,5,6,7,8,9,10)
- The student will demonstrate knowledge, skills, and/or abilities in music foundations in the areas of music theory and history, composition and arranging skills, major performance medium skills, keyboard skills, guitar skills, voice skills, non-symphonic instrumental skills, improvisation skills, conducting skills and/or movement skills. (UO: 1,2,5,6,7,8,9,10)
- The student will demonstrate knowledge, skills and/or abilities in music therapy in the areas of foundations and principles, client assessment, treatment planning, therapy implementation, therapy evaluation, documentation, and/or termination/discharge planning. (UO: 1,2,5,6,7,8,9,10)
- The student will demonstrate knowledge, skills, and/or abilities in the professional role, ethics, and interdisciplinary collaboration. (UO: 1,2,5,6,7,8,9,10)
- The student will demonstrate knowledge and skills in research methodology. (1,2,3,4,8,10)
- The student will participate in and benefit from supervision and/or perform administrative duties. (UO: 1,2,5,6,7,8,9,10)
- Demonstrate a basic foundation on voice, piano, guitar, and percussion. Lead and accompany proficiently on instruments including, but not limited to voice, piano, guitar, and percussion. Sing in tune with a pleasing quality and adequate volume both with accompaniment and acapella. (UO: 2,6)

## Related Links

Music Therapy, BM Program Page (<https://www.sru.edu/academics/majors-and-minors/music-therapy/>)

Music Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/music/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 3.0 or higher

Overall GPA: 2.0 or higher

## Summary\*

Code	Title	Hours
	Rock 2 Studies Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	83

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select one of the following:		3
MUSI 114-414	Symphonic Wind Ensemble	
MUSI 115-415	Concert Choir	
MUSI 116-416	University Choir	
MUSI 118-418	Marching Pride	
MUSI 119-419	Concert Band	
MUSI 121-421	Symphony Orchestra	
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
WAIVED		
<i>Natural Sciences Inquiry</i>		
BIOL 216	Anatomy and Physiology I with Lab	3
or BIOL 217	Anatomy and Physiology II with Lab	
or BIOL 110	The Human Body: Fundamentals of Structure and Physiology	

<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		12

### Additional Rock Studies 2 Requirements (15 Credits)

PSYC 105	Introduction to Psychology	3
SPED 121	Overview of Special Education	3
or SPED 122	Low Incidence Disabilities	
CDEV 248	Human Development and Education	3
or PSYC 244	Developmental Psychology	
PSYC 276	Introduction to Abnormal Psychology	3
Select one of the following:		3
ENGL 327	Healthcare Writing	

PHIL 325	Medical/Health Care Ethics	
GNDR 415	Feminist Perspectives in the Disciplines	
HONR 492	Innovation for Positive Change	
Subtotal		15
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- 42 major credits must be taken at SRU or PASSHE
- 42 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Required Music Courses</b>		
Students must earn a 'C' or higher in Musicianship Skills and Music Theory courses and in Functional Guitar <sup>1</sup>		
Select one of the following:		1-2
MUSI 133	Class Voice I (BGRPXSVM) <sup>2</sup>	
MUSI 299	Diction for Singers (V) <sup>2</sup>	
MUSI 134	Voice Methods <sup>2</sup>	1
MUSI 137	Functional Guitar for Music Therapy I <sup>2,3</sup>	1
MUSI 138	Functional Guitar for Music Therapy II <sup>2,3</sup>	1
MUSI 151	Music Theory and Analysis I <sup>2,3</sup>	2
MUSI 154	Musicianship Skills I <sup>2,3</sup>	1
MUSI 206	Fundamentals of Conducting <sup>2</sup>	1

MUSI 247	Percussion Methods <sup>2,3</sup>	1-2
MUSI 253	Music Theory and Analysis II <sup>2,3</sup>	2
MUSI 254	Music Theory and Analysis III <sup>2,3</sup>	2
MUSI 255	Music Theory and Analysis IV <sup>2,3</sup>	2
MUSI 256	Musicianship Skills II <sup>2,3</sup>	1
MUSI 257	Musicianship Skills III <sup>2,3</sup>	1
MUSI 258	Musicianship Skills IV <sup>2,3</sup>	1
MUSI 350	Computer Technology in Music <sup>2</sup>	2
MUSI 351	Arranging & Orchestration <sup>2</sup>	2
MUSI 359	History of Music I <sup>2,3</sup>	3
MUSI 360	Keyboard Improvisation <sup>2</sup>	1
MUSI 361	Instrumental Improvisation <sup>2</sup>	1
MUSI 373	History of Music II <sup>2</sup>	3
MUSI 473	History of Popular Musics <sup>2</sup>	3
Subtotal		33-35

## Required Music Therapy Courses

Students must earn a 'C' grade or higher in all music therapy courses

MUSI 127	Orientation to Music Therapy <sup>2,3</sup>	2
MUSI 199	Fundamental Skills in Music Therapy <sup>2,3</sup>	2
MUSI 228	Therapeutic Musical Strategies <sup>2,3</sup>	2
MUSI 229	Clinical Integration <sup>2,3</sup>	1
MUSI 230	Clinical Integration <sup>2,3</sup>	1
MUSI 236	Music Therapy Assessment, Measurement and Evaluation <sup>2,3,4</sup>	2
MUSI 312	Music Therapy for Children <sup>2,3,4</sup>	3
MUSI 327	Psychology of Music <sup>2,3,4</sup>	3
MUSI 329	Clinical Integration <sup>2,3</sup>	1
MUSI 330	Clinical Integration <sup>2,3</sup>	1
MUSI 428	Music Therapy Advanced Topics <sup>2,3,4</sup>	3
MUSI 432	Clinical Integration <sup>2,3</sup>	1
MUSI 433	Clinical Integration <sup>2,3</sup>	1
MUSI 440	Music Therapy for Adult Clients <sup>2,3,4</sup>	3
Subtotal		26

## Additional Requirements

Required Courses Outside of Major Department

PSYC 276	Introduction to Abnormal Psychology <sup>2</sup>	3
Subtotal		3

## Major Applied - Must all be in same instrument

Students must earn a "C" or better in each semester of applied major study. Four credits at the 300+ level are required.

Select one of the following:		1
MUSI 179	Applied Music <sup>2</sup>	
MUSI 181	Applied Voice <sup>2</sup>	
MUSI 182	Applied Strings (Violin, Viola, Cello, Bass, Guitar) <sup>2</sup>	
MUSI 183	Applied Brass (Trumpet, Horn, Trombone, Tuba, Euphonium) <sup>2</sup>	
MUSI 184	Applied Woodwinds (Oboe, Clarinet, Bassoon, Flute, Saxophone) <sup>2</sup>	
MUSI 185	Applied Percussion <sup>2</sup>	
Select one of the following:		2
MUSI 279	Applied Piano <sup>2</sup>	

MUSI 281	Applied Voice <sup>2</sup>	
MUSI 282	Applied Strings (Violin, Viola, Cello, Bass, Guitar) <sup>2</sup>	
MUSI 283	Applied Brass (Trumpet, Horn, Trombone, Tuba, Euphonium) <sup>2</sup>	
MUSI 284	Applied Woodwinds (Oboe, Clarinet, Bassoon, Flute, Saxophone) <sup>2</sup>	
MUSI 285	Applied Percussion <sup>2</sup>	
Select one of the following:		2
MUSI 379	Applied Piano <sup>2</sup>	
MUSI 381	Applied Voice <sup>2</sup>	
MUSI 382	Applied Strings (Violin, Viola, Cello, Bass, Guitar) <sup>2</sup>	
MUSI 383	Applied Brass (Trumpet, Horn, Trombone, Tuba, Euphonium) <sup>2</sup>	
MUSI 384	Applied Woodwinds (Oboe, Clarinet, Bassoon, Flute, Saxophone) <sup>2</sup>	
MUSI 385	Applied Percussion <sup>2</sup>	
Select one of the following:		2
MUSI 479	Applied Piano <sup>2</sup>	
MUSI 481	Applied Voice <sup>2</sup>	
MUSI 482	Applied Strings (Violin, Viola, Cello, Bass, Guitar) <sup>2</sup>	
MUSI 483	Applied Brass (Trumpet, Horn, Trombone, Tuba, Euphonium) <sup>2</sup>	
MUSI 484	Applied Woodwinds (Oboe, Clarinet, Bassoon, Flute, Saxophone) <sup>2</sup>	
MUSI 485	Applied Percussion <sup>2</sup>	
Subtotal		7

**Minor Applied**

Select one of the following based on instrument: 4

*Voice and Instrumental Majors Only*

Select four credits of the following:

MUSI 131	Class Piano I	
& MUSI 132	and Class Piano II	
& MUSI 234	and Class Piano III	
& MUSI 235	and Class Piano IV <sup>2,3</sup>	
MUSI 179-479	Applied Piano <sup>2,3</sup>	

*Piano Majors Only* <sup>6</sup>

Class Piano cannot be counted toward the minor applied. Piano majors must select another instrument. Students must earn a 'C' or better each semester to move on to the next level.

Select four credits:

MUSI 181-481	Applied Voice <sup>2</sup>	
MUSI 182-482	Applied Strings (Violin, Viola, Cello, Bass) <sup>2</sup>	
MUSI 183-483	Applied Brass (Trumpet, Horn, Trombone, Tuba, Euphonium) <sup>2</sup>	
MUSI 184-484	Applied Woodwinds (Oboe, Clarinet, Bassoon, Flute, Saxophone) <sup>2</sup>	
MUSI 185-485	Applied Percussion <sup>2</sup>	
Subtotal		4

**Ensemble Participation**

Four semesters must be at the 300+ level. The student must earn a "C" or better in each semester to satisfy the requirement. Students must play in one ensemble every semester up to 7 semesters. See Ensemble Policy below.

Ensembles	
MUSI 109	Jazz Combo
MUSI 113	Saxophone Quartet
MUSI 114	Symphonic Wind Ensemble
MUSI 115	Concert Choir
MUSI 116	University Chorus
MUSI 117	Chamber Singers
MUSI 118	Marching Pride
MUSI 119	Concert Band
MUSI 120	Jazz Ensemble
MUSI 121	Symphony Orchestra
MUSI 122	Chamber String Ensemble
MUSI 123	Brass Ensemble
MUSI 124	Woodwind Ensemble
MUSI 125	Percussion Ensemble
MUSI 126	Flute Choir
MUSI 192	Tuba-Euphonium Ensemble
MUSI 193	Jazz Lab Band
MUSI 194	World Percussion Ensemble
MUSI 209	Jazz Combo
MUSI 213	Saxophone Quartet
MUSI 214	Symphonic Wind Ensemble
MUSI 215	Concert Choir
MUSI 216	University Chorus
MUSI 217	Chamber Singers
MUSI 218	Marching Pride
MUSI 219	Concert Band
MUSI 220	Jazz Ensemble
MUSI 221	Symphony Orchestra
MUSI 222	Chamber String Ensemble
MUSI 223	Brass Ensemble
MUSI 224	Woodwind Ensemble
MUSI 225	Percussion Ensemble
MUSI 226	Flute Choir
MUSI 233	Chamber Music Performance
MUSI 292	Tuba-Euphonium Ensemble
MUSI 293	Jazz Lab Band
MUSI 294	World Percussion Ensemble
MUSI 309	Jazz Combo
MUSI 313	Saxophone Quartet
MUSI 314	Symphonic Wind Ensemble
MUSI 315	Concert Choir
MUSI 316	University Chorus
MUSI 317	Chamber Singers
MUSI 318	Marching Pride
MUSI 319	Concert Band
MUSI 320	Jazz Ensemble
MUSI 321	Symphony Orchestra
MUSI 322	Chamber String Ensemble

MUSI 323	Brass Ensemble	
MUSI 324	Woodwind Ensemble	
MUSI 325	Percussion Ensemble	
MUSI 326	Flute Choir	
MUSI 392	Tuba-Euphonium Ensemble	
MUSI 393	Jazz Lab Band	
MUSI 394	World Percussion Ensemble	
MUSI 409	Jazz Combo	
MUSI 413	Saxophone Quartet	
MUSI 414	Symphonic Wind Ensemble	
MUSI 415	Concert Choir	
MUSI 416	University Chorus	
MUSI 417	Chamber Singers	
MUSI 418	Marching Pride	
MUSI 419	Concert Band	
MUSI 420	Jazz Ensemble	
MUSI 421	Symphony Orchestra	
MUSI 422	Chamber String Ensemble	
MUSI 423	Brass Ensemble	
MUSI 424	Woodwind Ensemble	
MUSI 425	Percussion Ensemble	
MUSI 426	Flute Choir	
MUSI 492	Tuba-Euphonium Ensemble	
MUSI 493	Jazz Lab Band	
MUSI 494	World Percussion Ensemble	
Subtotal		7
<b>Internship Requirements</b>		
MUSI 450	Music Therapy Internship	7-12
<b>Total Hours</b>		<b>87-94</b>

- <sup>1</sup> Voice majors –exempt from MUSI 133.
- <sup>2</sup> Course counts for 50% of Major requirements and Major GPA
- <sup>3</sup> Grade of “C” or better required.
- <sup>4</sup> Successful completion of upper division review prior to registration.
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## ensemble policy

While students are encouraged to participate in a variety of ensemble experiences, students must participate in at least one ensemble on their primary instrument every semester in which they are enrolled at SRU and taking applied lessons.

Students are required to complete an ensemble placement audition each semester after which ensemble directors, in consultation with applied teachers and advisors, will assign semester ensemble placements. Only once all ensembles have been staffed and no other opportunities exist for a specific primary instrument will participation on a secondary instrument be counted toward this requirement.

In addition, music education students whose primary instrument is voice must play an instrument in an instrumental ensemble for at least one semester and music education students whose primary instrument is

anything other than voice must sing in a vocal ensemble for at least one semester.

## Additional Information: Internship Requirements

- MUSI 450 Music Therapy Internship must be taken for 2 semesters, either for 7 credits for 900 hours (1 semester at 6 credits & 1 semester at 1 credit) or for 12 credits for 1040 hours (1 semester at 6 credits & 1 semester at 6 credits). The total pre-and post-internship music therapy clinical hours must equal at least 1200 hours.
- MT Majors are required to maintain a 2.0 overall GPA and 3.0 major GPA to remain in the program. All MT majors must successfully pass an Upper-Division Review (UDR) and Exit Interview to remain in the program. Failure to maintain the required GPA and/or pass UDR or the Exit Interview will mean that a student has to re-apply and re-audition for the MT program.

## Completed Requirement Checklist

### Requirement

- Piano Proficiency
- Music Therapy Skills Proficiency 2
- Music Therapy Skills Proficiency 4
- Music Therapy Upper Division Review
- Music Therapy Portfolio
- Musicianship Health Competency: Can be satisfied by passing the eight Musicianship Health Competency quizzes with scores of 70% or higher or by earning a C or better in MUSI 203, Musician's Health.
- Music Therapy Exit Interview

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

- International study programs (short-term, semester)
- High-Impact Practice (HIP) designated classes
- Student-faculty research
- Student leadership development
- Career education and development
- Internships
- Field Experiences
- Student Teaching
- Volunteering (schools, health care facilities, churches, communities)

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MUSIC THERAPY - BM (5273)

This program is effective as of Spring 2023



Revised 12.19.2022  
 UCC 11.29.2022

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
Major Applied (100 level)		1
Large Ensemble (100 level) - Arts Inquiry #1		1
MUSI 127	Orientation to Music Therapy	2
MUSI 131	Class Piano I <sup>1</sup>	1
MUSI 137	Functional Guitar for Music Therapy I	1
MUSI 151	Music Theory and Analysis I	2
MUSI 154	Musicianship Skills I <sup>2</sup>	1
Select one of the following:		1-2
MUSI 133	Class Voice I (Instrumental majors)	
MUSI 299	Diction for Singers (Voice majors only) <sup>5</sup>	
ENGL 102	Critical Writing	3
SUBJ 139	Foundations of Academic Discovery <sup>3</sup>	3
<b>Hours</b>		<b>16-17</b>
<b>Spring</b>		
Major Applied (200 level)		1
Large Ensemble (200 level) - Arts Inquiry #2		1
MUSI 132	Class Piano II <sup>1</sup>	1
MUSI 134	Voice Methods (all majors)	1
MUSI 138	Functional Guitar for Music Therapy II	1
MUSI 199	Fundamental Skills in Music Therapy	2
MUSI 236	Music Therapy Assessment, Measurement and Evaluation	2
MUSI 253	Music Theory and Analysis II	2
MUSI 256	Musicianship Skills II	1
PSYC 105	Introduction to Psychology	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
Major Applied (200 level)		1
Large Ensemble (200 level) - Arts Inquiry #3		1
MUSI 206	Fundamentals of Conducting	1
MUSI 228	Therapeutic Musical Strategies	2
MUSI 229	Clinical Integration	1
MUSI 234	Class Piano III <sup>1</sup>	1
MUSI 247	Percussion Methods	1-2
MUSI 254	Music Theory and Analysis III	2
MUSI 257	Musicianship Skills III <sup>2</sup>	1
ENGL 104	Critical Reading	3
SPED 121 or SPED 122	Overview of Special Education or Low Incidence Disabilities	3
<b>Hours</b>		<b>17-18</b>
<b>Spring</b>		
Major Applied (300 level)		1
Major Ensemble (300 level)		1
MUSI 230	Clinical Integration	1
MUSI 235	Class Piano IV <sup>1</sup>	1

MUSI 255	Music Theory and Analysis IV	2
MUSI 258	Musicianship Skills IV <sup>2</sup>	1
MUSI 361	Instrumental Improvisation <sup>4</sup>	1
PSYC 276	Introduction to Abnormal Psychology	3
BIOL 216	Anatomy and Physiology I with Lab	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Music Therapy Upper-Division Review must be scheduled during semester IV <sup>6</sup>		
SCI 102	Understanding the Physical World	3
<b>Hours</b>		<b>20</b>
<b>Third Year</b>		
<b>Fall</b>		
Major Applied (300 level)		1
Large Ensemble (300 level)		1
MUSI 329	Clinical Integration	1
MUSI 350	Computer Technology in Music	2
MUSI 359	History of Music I	3
MUSI 360	Keyboard Improvisation <sup>4</sup>	1
MUSI 440	Music Therapy for Adult Clients	3
CDEV 248 or PSYC 244	Human Development and Education or Developmental Psychology	3
BIOL 110 or BIOL 216 or BIOL 217	The Human Body: Fundamentals of Structure and Physiology or Anatomy and Physiology I with Lab or Anatomy and Physiology II with Lab	3
<b>Hours</b>		<b>18</b>
<b>Spring</b>		
Major Applied (400 level)		1
Large Ensemble (400 level)		1
MUSI 312	Music Therapy for Children	3
MUSI 327	Psychology of Music	3
MUSI 330	Clinical Integration	1
MUSI 351	Arranging & Orchestration	2
MUSI 373	History of Music II	3
MUSI 433	Clinical Integration	1
MATH 117	Quantitative Reasoning	3
Music Therapy Exit Interview should be taken during Semester VI <sup>7</sup>		
<b>Hours</b>		<b>18</b>
<b>Fourth Year</b>		
<b>Fall</b>		
Major Applied (400 level)		1
Large Ensemble (400 level)		1
MUSI 428	Music Therapy Advanced Topics	3
MUSI 432	Clinical Integration	1
MUSI 473	History of Popular Musics	3
Humanities Inquiry (p. 29)		3
Select one of the following:		3
ENGL 327	Healthcare Writing	
PHIL 325	Medical/Health Care Ethics	

GNDR 415	Feminist Perspectives in the Disciplines	
HONR 492	Innovation for Positive Change	
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
MUSI 450	Music Therapy Internship (1 of 2 semesters)	6
<b>Hours</b>		<b>6</b>
<b>Summer</b>		
MUSI 450	Music Therapy Internship (2 of 2 semesters)	1-6
<b>Hours</b>		<b>1-6</b>
<b>Total Hours**</b>		<b>126-133</b>

- <sup>1</sup> Piano Proficiency: Music Therapy students are expected to achieve piano proficiency by the end of Class Piano IV or after their fourth semester of lessons for applied piano majors. Students will not be permitted to start their internship until the proficiency is passed. See guidelines. Piano majors will select another instrument for their minor applied requirement.
- <sup>2</sup> Skills Proficiency: Music therapy students must pass all aspects of the Skills Proficiencies before they can take upper-level MT classwork
- <sup>3</sup> Course offered in multiple subjects; cannot take course in first major subject
- <sup>4</sup> Music Therapy majors music take both Instrumental Improvisation and Keyboard Improvisation.
- <sup>5</sup> Voice majors must take Diction for Singers. Class is offered on a rotational basis. Even year program starts take this class during the freshman year. Odd year program starts take this class the sophomore year.
- <sup>6</sup> MT Upper Division Review must be taken during Semester IV
- <sup>7</sup> Music Therapy Exit Interview should be taken during Semester VI

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

Major Code: 5273  
Revised: 04.21.2021

## Music, Bachelor of Arts (BA)

The Bachelor of Arts in Music program at Slippery Rock University provides a general, highly customizable music education that will prepare students for a variety of careers within the music industry. For more information about the BA in Music, please contact Dr. Glenn Utsch.

For information regarding auditions for the Music Department, please click here (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/music/auditions/>).

## Program Learning Outcomes

- The student will be able to identify and analyze the basic elements of music both visually and aurally including analyzing musical compositions focusing on theoretical and historical aspects. (UO: 2,6)
- The student will be able to identify, explain and appreciate music of different historical periods, cultures, and composers. (UO: 1,2,6,9)

- The student will be able to use critical thinking skills and communicate effectively in oral, written, and electronic mode. (UO: 1,2,6)
- The student will be able to harmonize, transpose, compose, arrange, and orchestrate music utilizing concepts of the basic elements of music as well as instrumental and vocal characteristics. (UO: 2,6)
- The student will be able to demonstrate basic conducting patterns, techniques, expressions, and rehearsal techniques with vocal and instrumental ensembles. (UO: 2,6)
- The student will be able to understand and appreciate the creative process of the arts by exploring creative ways to express feelings, perform music, and select resources and procedures for instruction/therapy with their students/clients. (UO: 2,6,7,8,9)
- The student will be able to play scales, accompaniments, song repertoire, songs by ear, and transpose melodies with harmonization on the guitar. (UO: 2,6)
- The student will be able to explain and identify jazz concepts and styles and perform clinical instrumental improvisation techniques. (UO: 2,6)
- The student will be able to perform as a member of a musical ensemble demonstrating proper techniques of ensemble performance such as balance and blend, as well as musical and social interaction, and cooperation to achieve shared goals. (UO: 1,2,5,6,7,8,9)
- The student will be able to play scales, repertoire, hymns, music therapy literature, accompaniments, songs by ear, and transposed melodies with harmonization on the piano. (UO: 2,6)
- The student will be able to sing or play his/her primary instrument with appropriate techniques of posture, breathing, tone production, articulation/bowing, diction, intonation, expression, and style. (UO: 2,5,6)
- The student will be able to demonstrate knowledge of instrumental/vocal repertoire by performing music of different styles, periods, and composers. (UO: 2,6)
- The student will perform in a student recital or performance class every semester. (UO: 1,2,5,6,7)
- The student will be able to identify instrumental/vocal strengths and weaknesses. (UO: 1,2,5,6)
- The student will be able to use technology in composition, performance, analysis, teaching and research. (UO: 2,6,10)

## Related Links

Music, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/music/>)

Music Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/music/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher  
Overall GPA: 2.0 or higher

Summary\*

Code	Title	Hours
Rock 2 Studies Requirements		42
Modern Language Requirement		0-9
Other Basic Requirements		0-3
Computer Competency		0-3
Major Requirements		42
Electives		36

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies 2 Requirements

Code	Title	Hours
The Rock		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
Integrated Inquiry		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
Thematic Thread		
Select 12 Credits (p. 29) <sup>2</sup>		12
Total Hours		42

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
Complete 0-9 credits		0-9
Total Hours		0-9

Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
Total Hours		0-3

Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
Total Hours		0-3

DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

Major Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above

Code	Title	Hours
Required Music Courses		
MUSI 151	Music Theory and Analysis I <sup>1,2</sup>	2
MUSI 154	Musicianship Skills I <sup>1,2</sup>	1
MUSI 203	Musician's Health (non-voice majors) <sup>1,2</sup>	1
MUSI 206	Fundamentals of Conducting <sup>1</sup>	1
MUSI 253	Music Theory and Analysis II <sup>1,2</sup>	2
MUSI 254	Music Theory and Analysis III <sup>1,2</sup>	2
MUSI 255	Music Theory and Analysis IV <sup>1,2</sup>	2
MUSI 256	Musicianship Skills II <sup>1,2</sup>	1
MUSI 257	Musicianship Skills III <sup>1,2</sup>	1
MUSI 258	Musicianship Skills IV <sup>1,2</sup>	1
Select one of the following:		2
MUSI 350	Computer Technology in Music <sup>1</sup>	
MUSI 351	Arranging & Orchestration <sup>1</sup>	
MUSI 359	History of Music I <sup>1</sup>	3
MUSI 373	History of Music II <sup>1</sup>	3

MUSI 473	History of Popular Musics <sup>1</sup>	3
Subtotal		25

**Major Applied**

Students must earn a "C" or better in each semester of applied major study. Four semesters must be at the 300+ level. Students must earn a "C" or better to move on to the next level.

Select two credits of the following: 2

MUSI 179	Applied Music <sup>1</sup>
MUSI 181	Applied Voice <sup>1</sup>
MUSI 182	Applied Strings (Violin, Viola, Cello, Bass) <sup>1</sup>
MUSI 183	Applied Brass (Trumpet, Horn, Trombone, Tuba, Euphonium) <sup>1</sup>
MUSI 184	Applied Woodwinds (Oboe, Clarinet, Bassoon, Flute, Saxophone) <sup>1</sup>
MUSI 185	Applied Percussion <sup>1</sup>

Select two credits of the following: 2

MUSI 279	Applied Piano <sup>1</sup>
MUSI 281	Applied Voice <sup>1</sup>
MUSI 282	Applied Strings (Violin, Viola, Cello, Bass) <sup>1</sup>
MUSI 283	Applied Brass (Trumpet, Horn, Trombone, Tuba, Euphonium) <sup>1</sup>
MUSI 284	Applied Woodwinds (Oboe, Clarinet, Bassoon, Flute, Saxophone) <sup>1</sup>
MUSI 285	Applied Percussion <sup>1</sup>

Select two credits of the following: 2

MUSI 379	Applied Piano <sup>1</sup>
MUSI 381	Applied Voice <sup>1</sup>
MUSI 382	Applied Strings (Violin, Viola, Cello, Bass) <sup>1</sup>
MUSI 383	Applied Brass (Trumpet, Horn, Trombone, Tuba, Euphonium) <sup>1</sup>
MUSI 384	Applied Woodwinds (Oboe, Clarinet, Bassoon, Flute, Saxophone) <sup>1</sup>
MUSI 385	Applied Percussion <sup>1</sup>

Select one credit of the following: 1

MUSI 479	Applied Piano <sup>1</sup>
MUSI 481	Applied Voice <sup>1</sup>
MUSI 482	Applied Strings (Violin, Viola, Cello, Bass) <sup>1</sup>
MUSI 483	Applied Brass (Trumpet, Horn, Trombone, Tuba, Euphonium) <sup>1</sup>
MUSI 484	Applied Woodwinds (Oboe, Clarinet, Bassoon, Flute, Saxophone) <sup>1</sup>
MUSI 485	Applied Percussion <sup>1</sup>

Subtotal 7

**Ensemble Courses**

Four semesters must be at the 300+ level. The student must earn a "C" or better in each semester to satisfy the requirement. Students must play in one ensemble every semester up to 7 semesters. See Ensemble Policy below.

**Ensembles**

MUSI 109	Jazz Combo
MUSI 113	Saxophone Quartet
MUSI 114	Symphonic Wind Ensemble
MUSI 115	Concert Choir
MUSI 116	University Chorus

MUSI 117	Chamber Singers
MUSI 118	Marching Pride
MUSI 119	Concert Band
MUSI 120	Jazz Ensemble
MUSI 121	Symphony Orchestra
MUSI 122	Chamber String Ensemble
MUSI 123	Brass Ensemble
MUSI 124	Woodwind Ensemble
MUSI 125	Percussion Ensemble
MUSI 126	Flute Choir
MUSI 192	Tuba-Euphonium Ensemble
MUSI 193	Jazz Lab Band
MUSI 194	World Percussion Ensemble
MUSI 209	Jazz Combo
MUSI 213	Saxophone Quartet
MUSI 214	Symphonic Wind Ensemble
MUSI 215	Concert Choir
MUSI 216	University Chorus
MUSI 217	Chamber Singers
MUSI 218	Marching Pride
MUSI 219	Concert Band
MUSI 220	Jazz Ensemble
MUSI 221	Symphony Orchestra
MUSI 222	Chamber String Ensemble
MUSI 223	Brass Ensemble
MUSI 224	Woodwind Ensemble
MUSI 225	Percussion Ensemble
MUSI 226	Flute Choir
MUSI 233	Chamber Music Performance
MUSI 292	Tuba-Euphonium Ensemble
MUSI 293	Jazz Lab Band
MUSI 294	World Percussion Ensemble
MUSI 309	Jazz Combo
MUSI 313	Saxophone Quartet
MUSI 314	Symphonic Wind Ensemble
MUSI 315	Concert Choir
MUSI 316	University Chorus
MUSI 317	Chamber Singers
MUSI 318	Marching Pride
MUSI 319	Concert Band
MUSI 320	Jazz Ensemble
MUSI 321	Symphony Orchestra
MUSI 322	Chamber String Ensemble
MUSI 323	Brass Ensemble
MUSI 324	Woodwind Ensemble
MUSI 325	Percussion Ensemble
MUSI 326	Flute Choir
MUSI 392	Tuba-Euphonium Ensemble
MUSI 393	Jazz Lab Band
MUSI 394	World Percussion Ensemble
MUSI 409	Jazz Combo
MUSI 413	Saxophone Quartet

MUSI 414	Symphonic Wind Ensemble	
MUSI 415	Concert Choir	
MUSI 416	University Chorus	
MUSI 417	Chamber Singers	
MUSI 418	Marching Pride	
MUSI 419	Concert Band	
MUSI 420	Jazz Ensemble	
MUSI 421	Symphony Orchestra	
MUSI 422	Chamber String Ensemble	
MUSI 423	Brass Ensemble	
MUSI 424	Woodwind Ensemble	
MUSI 425	Percussion Ensemble	
MUSI 426	Flute Choir	
MUSI 492	Tuba-Euphonium Ensemble	
MUSI 493	Jazz Lab Band	
MUSI 494	World Percussion Ensemble	
Subtotal		7
<b>Music Electives</b>		
Non-Voice Majors		3
MUSI 3XX/4XX	Any MUS 300/400 Level course	
Voice Majors		
MUSI 3xx/4xx	Any 300/400 Level Music course	
Subtotal		3
<b>Required Music Electives - Voice Majors Only</b>		
MUSI 299	Diction for Singers <sup>1</sup>	
MUSI 399	Diction for Singers II <sup>1</sup>	
Subtotal		0
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

<sup>2</sup> Grade of "C" or better must be earned in this course.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Recommended Electives

Code	Title	Hours
MUSI 131	Class Piano I <sup>1</sup>	1
MUSI 132	Class Piano II <sup>1</sup>	1
MUSI 234	Class Piano III <sup>1</sup>	1
MUSI 235	Class Piano IV <sup>1</sup>	1
MUSI 179-479	Applied Piano <sup>1</sup>	1-4
MUSI 301	Women and Music	3
MUSI 360	Keyboard Improvisation	1
or MUSI 361	Instrumental Improvisation	
MUSI 499	Applied Recital	1
MUSI 300/400 level	Additional Applied Minor	1-4

<sup>1</sup> Grade of "C" or better must be earned in this course.

## Ensemble Policy

While students are encouraged to participate in a variety of ensemble experiences, students must participate in at least one ensemble on their

primary instrument every semester in which they are enrolled at SRU and taking applied lessons.

Students are required to complete an ensemble placement audition each semester after which ensemble directors, in consultation with applied teachers and advisors, will assign semester ensemble placements.

Only once all ensembles have been staffed and no other opportunities exist for a specific primary instrument will participation on a secondary instrument be counted toward this requirement.

In addition, music education students whose primary instrument is voice must play an instrument in an instrumental ensemble for at least one semester and music education students whose primary instrument is anything other than voice must sing in a vocal ensemble for at least one semester.

## Completed Requirement Checklist

### Requirement Description

- Musicianship Health Competency: Can be satisfied by passing the eight Musicianship Health Competency quizzes with scores of 70% or higher OR by earning a C or better in MUSI 203, Musician's Health.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Student leadership development
5. Career education and development
6. Internships
7. Field Experiences
8. Student Teaching
9. Volunteering (schools, health care facilities, churches, communities)

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MUSIC - BA (5 53)

This program is effective as of Spring 2023

Revised 12.19.2022

UCC 11.29.2022



## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
Major Applied – 100 level		1
Major Ensemble – 100 level (Arts Inquiry 1)		1
MUSI 151	Music Theory and Analysis I (F)	2
MUSI 154	Musicianship Skills I (F)	1
Select one of the following:		1
Music Elective		
MUSI 299	Diction for Singers (voice majors only) (F) <sup>1</sup>	
ENGL 102	Critical Writing	3
ESAP 101	FIRST Seminar *	1
Integrated Inquiry/Thread		3
SUBJ 139	Foundations of Academic Discovery <sup>2</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Major Applied – 100 level		1
Major Ensemble – 100 level (Arts Inquiry 2)		1
MUSI 203	Musician's Health	1
MUSI 253	Music Theory and Analysis II (S)	2
MUSI 256	Musicianship Skills II (S)	1
Select one of the following:		1
Music Elective		
MUSI 399	Diction for Singers II (voice majors only)(S) <sup>1</sup>	
MATH 117	Quantitative Reasoning	3
Integrated Inquiry/Thread		3
Free Elective		3
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
Major Applied – 200 level		1
Major Ensemble – 200 level (Arts Inquiry 3)		1
MUSI 254	Music Theory and Analysis III (F)	2
MUSI 257	Musicianship Skills III (F)	1
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Rock Studies 2 Requirements (p. 29)		3
Foreign Language (101)/Free Elective <sup>3</sup>		3
Declare a Thematic Thread		
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
Major Applied – 200 level		1
Major Ensemble – 200 Level		1
MUSI 255	Music Theory and Analysis IV (S)	2
MUSI 258	Musicianship Skills IV (S)	1
ENGL 104	Critical Reading	3
Foreign Language (102)/ Free Elective <sup>3</sup>		3
Free Elective		1

<b>Advanced Standing Review scheduled at the completion of 60 credits</b>	
<b>Hours</b>	<b>12</b>
<b>Third Year</b>	
<b>Fall</b>	
Major Applied – 300 level	1
Major Ensemble – 300 level	1
MUSI 359	History of Music I
Select one of the following:	0-2
MUSI 350	Computer Technology in Music (F) <sup>4</sup>
MUSI 351	Arranging & Orchestration (S)
Rock Studies 2 Requirements (p. 29)	3
Foreign Language (103)/Free Elective <sup>3</sup>	3
Free Elective	3
<b>Hours</b>	<b>14-16</b>
<b>Spring</b>	
Major Applied – 300 level	1
Major Ensemble – 300 level	1
MUSI 373	History of Music II
Select one of the following:	0-2
MUSI 350	Computer Technology in Music (F) <sup>4</sup>
MUSI 351	Arranging & Orchestration (S)
Rock Studies 2 Requirements (p. 29)	3
Integrated Inquiry/Thread	3
Free Elective	3
<b>Hours</b>	<b>14-16</b>
<b>Fourth Year</b>	
<b>Fall</b>	
Major Applied – 400 level	1
Large Ensemble – 400 level	1
MUSI 206	Fundamentals of Conducting
MUSI 431	Pedagogy
MUSI 473	History of Popular Musics
Music Electives	3
Integrated Inquiry/Thread	3
<b>Hours</b>	<b>13</b>
<b>Spring</b>	
Major Applied – 400 level	1
Major Ensemble – 400 level	1
Rock Studies 2 Requirements (p. 29)	3
Free Electives	6
Integrated Inquiry/Thread	3
<b>Hours</b>	<b>14</b>
<b>Total Hours**</b>	
<b>113-117</b>	

<sup>1</sup> All voice majors must take Diction for Singers I (MUSI 299) and II (MUSI 399). These classes will be offered on a rotational basis. If you begin your program in an even year you will take these classes in your freshmen year. If you begin your program in an odd year you will take them in your sophomore year.

<sup>2</sup> Course offered in multiple subjects; cannot take course in first major subject

- <sup>3</sup> All candidates for the Bachelor of Arts degree must demonstrate competency in a modern language at the 103 level through course work or placement tests.
- <sup>4</sup> Student will take either Computer Technology in Music or Arranging/Orchestration.
- <sup>5</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.
- \* Students are encouraged to take ESAP 101 as a Free Elective.

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

Major Code: 5 53

Revised: 03.2020

## Music, Minor

### 25 Credit Hours

The Minor in Music is designed for the non-music major with a music background to explore a variety of music subjects including music theory, music skills, music history, ensembles, music and free electives, and applied music lessons. Students must pass an audition on their main instrument to be accepted into this program.

To access Minor Requirements, please view the Curriculum Guide tab.

For information regarding auditions for the Music Department, please click here (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/music/auditions/>).

## Related Links

Music, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/music/>)

Music Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/music/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.00 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Music Theory Courses</b>		
MUSI 151	Music Theory and Analysis I	2
MUSI 154	Musicianship Skills I	1
MUSI 253	Music Theory and Analysis II	2

MUSI 256	Musicianship Skills II	1
<b>Required Music History Courses</b>		
MUSI 359	History of Music I	3
or MUSI 373	History of Music II	
<b>Applied Lessons (1/2 hour each week)</b>		
Any of the applied lessons approved during student's audition		4
<b>Ensemble</b>		
An ensemble is selected according to a student's Major applied area.		
Select three credits of the following:		3
MUSI 114-414	Symphonic Wind Ensemble	
MUSI 115-415	Concert, Choir	
MUSI 117-417	Chamber Singers	
MUSI 118-418	Marching Pride	
MUSI 119-419	Concert Band	
MUSI 120-420	Jazz Ensemble	
MUSI 121-421	Symphony Orchestra	
MUSI 123-423	Brass Ensemble	
<b>Electives</b>		
Select any two MUSI courses 300 level or above		6
<b>Free Electives</b>		
Select three credits of MUSI courses in Music Major series <sup>1</sup>		3
<b>Total Hours</b>		<b>25</b>

<sup>1</sup> Except for MUSI 130, MUSI 102, MUSI 104, MUSI 105, MUSI 106, MUSI 107, MUSI 201

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN MUSIC (56A)

Revised 04.03.2020

## Nonprofit Management, Empowerment and Diversity Studies

Chair	Secretary	Location	Department Phone
Ms. Alice Del Vecchio	Jennifer Massella	200 Spotts World Culture Building	724-738-4192

## Faculty

Jennifer Bindernagel

**Instructor**

Nonprofit Mgt, Empower&Div Stu  
M.S.W., University of Pittsburgh  
B.S., Slippery Rock University

**Mustafa Casson**

Associate Professor  
Nonprofit Mgt, Empower&Div Stu  
Ph.D., University of Washington  
M.A., University of Washington  
B.A., Grinnell College

**Alice Del Vecchio**

Assistant Professor  
Nonprofit Mgt, Empower&Div Stu  
M.P.A., Sangamon State University  
B.A., Lakeland College

**Akita Donald**

Instructor  
Nonprofit Mgt, Empower&Div Stu  
M.S., Carlow University  
B.A., Carlow University

**Richelle Dykstra-Crookshanks**

Associate Professor  
Nonprofit Mgt, Empower&Div Stu  
Ph.D., The University of Akron  
M.A., Cleveland State University  
B.A., Butler University

**Cindy LaCom**

Professor  
Nonprofit Mgt, Empower&Div Stu  
Ph.D., University of Oregon  
M.A., California State University (Chico)  
B.A., California State University (Chico)

**Melissa Swauger**

Professor  
Nonprofit Mgt, Empower&Div Stu

**Matthew Zarit**

Professor  
Nonprofit Mgt, Empower&Div Stu  
Ph.D., University of Pittsburgh  
M.A., University of Pittsburgh  
M.S., Carnegie Mellon University  
B.A., Syracuse University

## Programs

### Majors

- Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Anthropology (p. 1024)
- Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Cognitive Science (p. 1026)
- Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Cultural Area Studies (p. 1027)
- Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Gender and Diversity Studies (p. 1029)
- Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Leadership Studies (p. 1031)

- Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Leadership Studies - Online Degree Completion Program (p. 1033)
- Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Liberal Arts (p. 1035)
- Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Liberal Arts - Online Degree Completion Program (p. 1037)
- Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Philanthropy and Nonprofit Management (p. 1038)
- Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Philanthropy and Nonprofit Management - Online Degree Completion Program (p. 1040)
- Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Sociology (p. 1042)

### Minors

- Anthropology, Minor (p. 1021)
- Gender Studies, Minor (p. 1023)
- Philanthropy and Nonprofit Management, Minor (p. 1044)
- Sociology, Minor (p. 1046)

### Certificates

- Diversity and Inclusion, Certificate (p. 1022)
- Hispanic Serving Non-Profit Organizations, Certificate (p. 1023)
- Managing Nonprofit Organizations Serving the LGBTQIA+ Community (p. 1043)
- Philanthropy and Non-Profit Management, Certificate (p. 1044)
- Re-Entry Nonprofit Organization, Certificate (p. 1045)
- Writing for the Nonprofit Sector, Certificate (p. 1046)

## Courses

### GNDR COURSES

**GNDR 115 - Introduction to Gender Studies**

Introduction to Gender Studies is an interdisciplinary course that offers a foundation for an intersectional analyses of gender within the context of systems and structures of power and oppression.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**GNDR 120 - Introduction to the Study of Masculinities**

This course proposes to introduce and explore the topic of masculinity as a subject for critical study. In the course, students will read about and discuss how masculinities are constructed, presented and reproduced in media and popular culture. This course is meant for and open to everyone interested in taking a critical approach to the study of gender in societies, with specific focus on how (especially american) masculinities shape and are shaped by identity, culture, media, war, politics and economics.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

Thematic Thread(s): Transfer Thread Completion Course

**GNDR 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**GNDR 180 - Disability and Social Justice**

This course focuses broadly on elements of disability to analyze and deconstruct the history, politics, and culturally influenced production of "disability" and of disablement as a social justice concern.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**GNDR 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**GNDR 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**GNDR 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**GNDR 280 - Introduction to Disability Studies**

An introduction to the field of Disability Studies, which rejects medical paradigms and instead analyzes disability as a social, cultural and ideological phenomenon, with an intersectional and interdisciplinary focus on gender, race and socioeconomic status.

Credits: 3

**GNDR 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**GNDR 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**GNDR 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**GNDR 340 - Applied Queer Studies**

An introduction to the field of queer studies with an applied focus (on gender, race, disability, age, ethnicity, transactional issues) in an intersectional and interdisciplinary context. The course analyzes the historical, cultural, political and discursive production of LGBTQAI+ identities, heteronormativity as a form of control, and LGBTQAI+ activism and advocacy.

Prerequisite: GNDR 115<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

**GNDR 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GNDR 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GNDR 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GNDR 400 - Gender Studies and Porn Culture**

Integrating feminist, sociological, media, marketing, neurological, and philosophical perspectives, the course analyzes the social implications of porn consumption, porn production and methods of porn distribution, including technological developments (for example, 3D software development and the use of artificial intelligence in sex dolls). While gender organizes the analytic approaches of the course, it considers other embodied and intersectional identities as well.

Prerequisite: GNDR 115<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

**GNDR 415 - Feminist Perspectives in the Disciplines**

This course will explore feminist approaches to pedagogy and research in the humanities, social sciences, and natural sciences, highlighting how such approaches reshape and redirect the ways knowledge is constructed as well as the attendant, transformed results.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GNDR 450 - Gender Studies Internship**

Professional experiences, such as working with the Girl Scouts or state National Organization for Women (NOW), or working in a women's center or abuse/sexual assault center, that will allow students to either apply or function within a feminist framework to understand the complexity of women's lives and contribute to women's opportunities.

Credits: 1-12

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GNDR 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GNDR 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GNDR 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP Courses****INDP 102 - Introduction to Interdisciplinary Studies**

Developing a critical lens to engage in cultural studies through interdisciplinary perspectives with a specific focus on cultural diversity.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**INDP 103 - Contemporary Social Problems**

An analysis of major social problems confronting modern society.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course

**INDP 106 - Race and Ethnic Diversity in the USA**

An introduction to racial and ethnic diversity in the U.S.A., with focus on trends in immigration, demographics, socio-cultural dynamics and issues, past and present.

Credits: 3

Term(s) Typically Offered: Offered Spring & Summer Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Transfer Thread Completion Course

**INDP 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**INDP 170 - Making Sense of Our Social World**

The course is an introduction to the techniques and strategies used by interdisciplinary social scientists to develop an understanding of the root causes, social context, and personal consequences that define the key issues of our contemporary social and cultural worlds.

Credits: 3

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.



**INDP 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**INDP 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**INDP 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**INDP 201 - Principles of Sociology**

Basic concepts of social behavior, group structure and group processes.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

**INDP 202 - Introduction to Anthropology**

Human beings as cultural and biological entities. Emphasis is on primitive and peasant societies.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

**INDP 211 - Biological Anthropology**

This course provides an understanding of the place of the human species within the biological system. It stresses the concepts and processes of evolution and emphasizes the study of human and non-human primates as seen in the fossil record as well as through study of genetics and behavior.

Credits: 3

Thematic Thread(s): Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**INDP 212 - Archaeology/World Prehistory**

A discussion of culture history around the world based on archaeological evidence. It begins with early signs of culture called the Paleolithic or Old Stone Age of Africa, Asia, Europe and America (where it is named Paleo Indian), and concludes with the rise of complex, stratified cultures based on agriculture in the Middle East, America, and East Asia.

Credits: 3

Thematic Thread(s): Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

**INDP 226 - Population and Society**

Sociological/anthropological analysis of selected population trends, problems and controversies in the contemporary world-both literate and non-literate.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Thematic Thread(s): Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

**INDP 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**INDP 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**INDP 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**INDP 304 - Urban Sociology**

Sociological aspects of urban life. Includes metropolitan areas and small cities.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 309 - Health and Society**

An analysis of health services, public policy and institutional relations. Note: This course is taught from either a sociological or anthropological viewpoint. The student should check with the instructor to determine the approach being taken in the current offering.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 310 - Cultural Area Studies**

Anthropology course dealing with sociocultural phenomena of specific cultural areas. Topics to be announced. Course may be repeated one time in a different area.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 312 - Archaeology Techniques and Laboratory**

A course designed to introduce students to basic techniques in the field and to provide laboratory experience in working with field materials.

Prerequisite: INDP 202<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 317 - Statistics for the Social Sciences**

An enrichment course that introduces statistical concepts and techniques of data analysis with computer application to analyze contemporary social issues.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 318 - Research Methods in Interdisciplinary Studies**

Major methods and procedures used in interdisciplinary studies, including anthropology, cultural area studies, gender and diversity studies, leadership studies, nonprofit management and sociology.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 319 - Anthropology Methods**

Data gathering techniques and evaluation of anthropological phenomena from tribal, peasant and industrial societies.

Prerequisites: (SWCJ 202<sup>D</sup> or INDP 202<sup>D</sup> or PROF 202<sup>D</sup>) and (SWCJ 317<sup>D</sup> or INDP 317<sup>D</sup> or SOWK 317<sup>D</sup> or CRIM 317<sup>D</sup> or PROF 317<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 321 - Minority Groups**

An examination of the minority group concept with special emphasis on women, the poor, behavioral and physical minorities. Note: This course is taught from either a sociological or anthropological viewpoint. The student should check with the instructor to determine the approach being taken in the current offering.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Cultural Literacy & Community Building, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 322 - Archaeology of the Americas**

This course introduces the student to the unique intellectual and cultural achievements of the Native Civilizations of Central and South America prior to the arrival of the Spanish. Two thirds of the course concentrates on Mesoamerica, especially the Aztecs and the Maya. One third on South America, with an emphasis on the civilizations of Peru. The variety of cultural developments, including their great time depth, social, political, economic, and artistic achievements as revealed through archaeological exploration, are explored.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 323 - Deviant Behavior**

The subject and nature of deviance with particular emphasis on its relativity and its relationship to social control and social change.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 324 - The Family**

Comparative perspectives of the family as a universal social institution.

Note: This course is taught from either a sociological or anthropological viewpoint. The student should check with the instructor to determine the approach being taken in the current offering.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 326 - Society, Culture and Self**

An examination of the relationship between personal characteristics and social environment.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 327 - Religion and Society**

Explores the relationship between religion and society and some of the key issues confronting religion today.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### **INDP 330 - Collective Behavior**

An analysis of social movements, publics, crowds, mobs and similar social phenomena.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Thematic Thread(s): Cultural Literacy & Community Building, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### **INDP 339 - Gender Roles and Society**

An examination of gender roles, what they are, how they develop and how they are maintained. An examination of the effects of gender roles on education, occupation, the polity and other institutions as well as the effects of role restrictions of personal relationships. Note: This course is taught from either a sociological or anthropological viewpoint. The student should check with the instructor to determine the approach being taken in the current offering.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Thematic Thread(s): Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### **INDP 340 - Social Inequality**

Examination of the theoretical and practical implications of economic disparity across diverse populations: class, race, ethnicity and gender.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even, Offered Summer Terms

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### **INDP 342 - Sociology of Aging**

Social changes, which accompany aging. Emphasis placed upon how social processes influence patterns of aging and social problems of older people.

Credits: 3

Term(s) Typically Offered: Offered Winter Terms

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### **INDP 348 - Sociology of Organizations**

Approaches to the study of the structure and functions of large-scale social organizations.

Prerequisites: INDP 201<sup>D</sup> or INDP 202<sup>D</sup> or SWCJ 201<sup>D</sup> or SWCJ 202<sup>D</sup> or PROF 201<sup>D</sup> or PROF 202<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### **INDP 360 - Issues in Asia; Women in Asian Societies**

Students will have an opportunity to gain an in depth understanding of the issues surrounding the roles and status of women in a rapidly changing Asia; from both a historic and a current context. These issues, which are political, religious, economic, health, social justice and legal, among others are vital for women in Asia, their societies as well as this ever globalizing world.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### **INDP 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### **INDP 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### **INDP 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### **INDP 401 - Applied Anthropology**

Using anthropological concepts and methods, this course explores the role of archaeologists, and physical and cultural anthropologists in understanding and facilitating change in human biological and cultural issues.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### **INDP 412 - Basic Sociological Theory**

Historical and modern development of basic concepts of sociology and cultural anthropology.

Prerequisites: (INDP 201<sup>D</sup> or INDP 202<sup>D</sup> or SWCJ 201<sup>D</sup> or SWCJ 202<sup>D</sup> or PROF 201<sup>D</sup> or PROF 202<sup>D</sup>) and (SWCJ 318<sup>D</sup> or SWCJ 320<sup>D</sup> or INDP 318<sup>D</sup> or INDP 319<sup>D</sup> or SOWK 318<sup>D</sup> or CRIM 318<sup>D</sup> or PROF 201<sup>D</sup> or PROF 202<sup>D</sup> or PROF 318<sup>D</sup> or PROF 319<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 450 - Internship**

Supervised placement in selected professional agencies.

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 499 - Capstone: Applied Interdisciplinary Studies**

This seminar is designed to assist students in developing awareness and skills for entry into the career or graduate studies. Students enrolled will participate in career development activities, reflection on the application of their knowledge for a future career and submit a final portfolio project.

Prerequisites: INDP 102<sup>C</sup> and INDP 318<sup>D</sup>

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

Enrollment limited to students with department of Nonprofit Mgt, Empower&Div Stu or Interdisciplinary Programs.

**NLPA Courses****NLPA 120 - Civic Engagement and Community Decision-Making**

An introduction to civic engagement in a democratic society with a focus on the complex nature of public policy making and the role each citizen plays in the formation and modification of socially just public policies. Students will gain introductory skills in civil voice, civil discourse, public policy analysis and community mobilizing for social good.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course

**NLPA 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**NLPA 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**NLPA 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**NLPA 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**NLPA 200 - Empowered to Serve**

Planning a career where you will help others? The interdisciplinary approach of this course introduces students to the historical, cultural and ethical context of service; investigates the increase in the number of helping professionals; takes students on a journey of personal empowerment; and offers theories and best practices that prepare them to empower the persons they will serve in their professions. Assigned readings, case studies, service-learning experiences, structured reflection and discussions empower students to understand and develop individual purpose, become lifelong learners, and combine knowledge, skills, values and motivation to make a difference in the lives of those they serve. This course would be especially useful for students seeking careers in helping professions such as animal care and protection, community and public service, counseling, education, health and wellness, human rights, legal and protective services, the military or social services.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Transfer Thread Completion Course

**NLPA 220 - Introduction to Nonprofit Management**

An introduction to the nonprofit sector; emphasis on leadership and decision-making in rapidly growing areas of health and human service, cultural, environmental, educational, charitable, and religious organizations.

Credits: 3

Term(s) Typically Offered: Offered Spring & Summer Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Transfer Thread Completion Course, United States in Global Context

**NLPA 230 - Introduction to Public Administration**

This interdisciplinary and global approach to public administration will explore the theories and best practices employed by public servants to promote the public good through ethical, culturally competent, and efficient and effective service provision. Through case studies and service-learning projects, students will be encouraged to consider a cross sector approach for implementing and evaluating policies and procedures that impact quality of life both domestically and globally. Students will develop a greater understanding of the role public servants have in their lives, develop skills employed by these professionals and explore public service career opportunities.

Credits: 3

Term(s) Typically Offered: Offerings Vary

**NLPA 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**NLPA 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**NLPA 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**NLPA 305 - Financial Best Practices for Decision Makers**

Emphasizes practical use of accounting information to support decision making by those in fields such as business, sports, resort management, government, education, and not-for-profit. Overview of financial and managerial accounting from a user's perspective, including use and analysis of financial statements, internal control, budget preparation, and cost and revenues behavior patterns. (For non-business majors)

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**NLPA 320 - Community Change and Development**

This course surveys the field of community development within the context of community collaboration and civic leadership. Topics include social capital, asset-based community development, sustainable community programs, economic development programs, private/public partnerships, and the shared role of the private, public, nonprofit sectors and everyday citizens in community development.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**NLPA 325 - Social and Ethical Issues in Philanthropy and Fundraising**

Resource development, including grant writing and social entrepreneurs, is increasingly important to the future of nonprofit and educational organizations. This course addresses methods for integrating resource development and income generation into an organization's life. Three themes are found in this course: resource development as a management function, resource development as a management process, and issues in resource development.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**NLPA 328 - Program Design and Evaluation in Nonprofit and Governmental Organizations**

Effective and efficient programs change lives! This course offers students the strategies and best practices for designing high quality programs, the tools and ethical framework to monitor program delivery, the qualitative and quantitative research skills essential for relevant evaluation and the necessary processes for program elimination, modification and scaling. Through case studies, service-learning projects and other hands-on assignments, students will be challenged to apply concepts to practice including the preparation of SMART objectives, logic models, project timelines, evaluation plans, program reports and recommendations for future programming.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**NLPA 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**NLPA 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**NLPA 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**NLPA 450 - Internship**

Supervised placement in selected professional agencies.

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**NLPA 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**NLPA 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**NLPA 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Anthropology, Minor

### ANTHROPOLOGY AT SRU

Through the anthropology curriculum, students will gain skills and experiences in the classroom with real-world application, regardless of career path. Anthropology majors and minors begin the program by taking Introduction to Anthropology, which explores the fundamentals of human evolution, the culture concept and cultural diversity. Each student then designs a complete anthropological curriculum around a specific area of focus (e.g., sociocultural, archaeological, evolutionary, applied) over a period of individualized advisement by taking courses across a range of disciplines. This interdisciplinary degree is designed to enrich students' lives and prepare them for successful careers after graduation.

To access Minor Requirements, please view the Curriculum Guide tab.

**Related Links**

Anthropology, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/anthropology/>)

Anthropology Department Page (<https://www.sru.edu/academics/majors-and-minors/anthropology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

**Curriculum Guide****GPA Requirements**

Minor GPA: 2.0 or higher

## Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Courses</b>		
INDP 202	Introduction to Anthropology	3
INDP 211	Biological Anthropology	3
INDP 212	Archaeology/World Prehistory	3
INDP 319	Anthropology Methods	3
INDP 401	Applied Anthropology	3
Select one of the following:		3
INDP 310	Cultural Area Studies	
GES 303	Asia	
GES 308	Europe	
GES 309	Africa	
<b>Total Hours</b>		<b>18</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN ANTHROPOLOGY (80A)

This program is effective as of Fall 2003

Revised 8-2019

## Diversity and Inclusion, Certificate

The world that we live in is increasingly characterized by diversity. This certificate is designed to foster an understanding of the historical, political, sociological and legal contexts within the United States and how these contexts impact issues of diversity. In this certificate each of these domains of diversity, and the intersections between them, will be interrogated and deconstructed for their individual effects and examine interrelatedness. This understanding of diversity will foster communication of complex ideas related to equity, teach strategies to negotiate issues of power, and position oneself to embrace inclusion and act as an ally/advocate for people in systematically marginalized groups.

The required credit hours are 15. Students need to complete the following courses:

- INDP 106 Racial and Ethnic Diversity in the US
- INDP 321 Minority Groups

AND 3 of the following:

- GNDR 115 Intro to Gender Studies OR INDP 339 Gender Roles
- GNDR 280 Disability Studies
- GNDR 340 Applied Queer Studies
- POLS 375 Women and Politics
- POLS 351 Politics of Race
- POLS 356 Gay & Lesbian Politics
- PHIL 140 World Religions
- MODL 215: ARAB 215, FREN 215, JAPN 215 or SPAN 215

## Related Links

Diversity and Inclusion, Certificate Page (<https://www.sru.edu/academics/certificates/diversity-and-inclusion-certificate/>)

Interdisciplinary Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/interdisciplinary-programs/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Certificate GPA: 2.0 or higher

### CERTIFICATE REQUIREMENTS

Code	Title	Hours
<b>Course Requirements</b>		
INDP 106	Race and Ethnic Diversity in the USA	3
INDP 321	Minority Groups	3
<b>Select 3 of the following:</b>		<b>9</b>
GNDR 115	Introduction to Gender Studies	
GNDR 280	Introduction to Disability Studies	
GNDR 340	Applied Queer Studies	
INDP 339	Gender Roles and Society	
POLS 356	Gay and Lesbian Politics	
POLS 351	Politics of Race	
POLS 375	Women and Politics	
PHIL 140	World Religions	
ARAB 215	Topics in Arabic Culture	
or FREN 215	Topics in French and Francophone Culture	
or JAPN 215	Topics in Japanese Culture	
or SPAN 215	Topics in Hispanic Culture	
<b>Total Hours</b>		<b>15</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum

categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

CERTIFICATE in Diversity and Inclusion (5DIN)

This program is effective as of Summer 2021.

Revised 07.15.2021

UCC 03.30.2021

## Gender Studies, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

The Gender Studies Program takes an interdisciplinary approach to teaching and learning, with courses in numerous departments: English, EGEO, Psychology, History, and Political Science, among others. Relevant to all majors, a minor in Gender Studies prepares students both to interact in a diverse and increasingly global professional world and to understand how our embodied experiences, while personal and individual, are also culturally shaped. In Gender Studies courses, students analyze power structures, gender identities, and culture to promote social change.

## Related Links

Gender Studies, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/gender-studies-minor/>)

Gender Studies Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/gender-studies/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Course</b>		
GNDR 115	Introduction to Gender Studies	3
<b>Electives</b>		
Select five of the following; Six credits must be taken at 300 or 400 level:		15
EGEO 368	Women in Science	
ENGL 243	Literature of the Women's Movement	
GERO 425	Women and Aging	
GES 105	World Regional Geography	
GES 361	Gender and the Environment	
GNDR 120	Introduction to the Study of Masculinities	

GNDR 280	Introduction to Disability Studies
GNDR 340	Applied Queer Studies
GNDR 400	Gender Studies and Porn Culture
GNDR 415	Feminist Perspectives in the Disciplines
GNDR 450	Gender Studies Internship
GNDR 490	Independent Study
HIST 313	U.S. Manhood and Masculinities
HIST 318	Gender and Sexuality in European Society
HIST 319	History of Women to 1750
HLTH 211	Women's Health Issues
INDP 339	Gender Roles and Society
INDP 360	Issues in Asia; Women in Asian Societies
MUSI 301	Women and Music
POLS 349	Utopian Experiments: Issues of Gender and Power
POLS 356	Gay and Lesbian Politics
POLS 375	Women and Politics
PSYC 300	Psychology of Women, Gender and Culture
PSYC 315	Psychology of Sexual and Gender Diversity
SPAN 335	Women in Hispanic Literature

**Total Hours**

**18**

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN GENDER STUDIES (98E)

This program is effective as of Fall 2020

Revised 8.21.20

UCC 03.24.20

## Hispanic Serving Non-Profit Organizations, Certificate

To access Certificate Requirements, please view the Curriculum Guide tab.

## Related Links

Non-Profit Management Program Page (<https://www.sru.edu/academics/certificates/nonprofit-management-certificate/>)

Modern Language and Cultures Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/modern-languages-and-cultures/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Certificate GPA: 2.0 or higher

### Certificate Requirements

Code	Title	Hours
<b>Course Requirements</b>		
SPAN 103	Spanish Language & Culture III	3
SPAN 215	Topics in Hispanic Culture	3
NLPA 120	Civic Engagement and Community Decision-Making	3
NLPA 220	Introduction to Nonprofit Management	3
NLPA 320	Community Change and Development	3
<b>Total Hours</b>		<b>15</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

CERTIFICATE in Hispanic Serving Nonprofit Organizations (5HSN)  
This program is effective as of Spring 2019.  
Revised 1/15/2019

## Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Anthropology

### WHAT CAN I DO WITH AN ANTHROPOLOGY DEGREE?

Learn about the world and yourself. Anthropology is a broad field that seeks to understand what it means to be human in all possible ways, from understanding our evolutionary origins to examining our cultural variability. Students can follow their curiosity and study human behavior in the past or present and gain skills in linguistics, cultural studies, critical thinking, writing and analysis that are applicable to careers in academia; the corporate and business world; government; education; historic preservation and archaeology; museums; advocacy; design; market research; international development; and health care.

## Related Links

Interdisciplinary Programs - Anthropology, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/anthropology/>)

Interdisciplinary Program Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/interdisciplinary-programs/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	42
	Electives	36

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Science Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15

### Thematic Thread

Select 12 Credits (p. 29) <sup>2</sup>		12
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Subtotal	12
<b>Total Hours</b>	<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above (Adviser approved courses)
- Courses used in this major may not be used to satisfy ROCK Studies 2, a minor, or another major's requirements.
- AP, Credit by Exam, CLEP, and institutional credit by exam may count towards the degree to a maximum of 45 credits. Pass/Fail and non-credit courses will not be counted in the major.

Code	Title	Hours
<b>Core Courses</b>		
<i>Oral and Written Communication</i>		
INDP 102	Introduction to Interdisciplinary Studies	3
INDP 202	Introduction to Anthropology <sup>1</sup>	3

## Interpersonal Skills and Civic Responsibility

Select at least six credits from the following:		6
INDP 106	Race and Ethnic Diversity in the USA <sup>1</sup>	
INDP 211	Biological Anthropology <sup>1</sup>	
INDP 212	Archaeology/World Prehistory <sup>1</sup>	
INDP 310	Cultural Area Studies <sup>1</sup>	
<i>Analytical, Quantitative &amp; Critical Thinking Skills</i>		
INDP 317	Statistics for the Social Sciences <sup>1</sup>	3
INDP 318	Research Methods in Interdisciplinary Studies <sup>1</sup>	3
INDP 499	Capstone: Applied Interdisciplinary Studies	3
Subtotal		21

## Emphasis Area

Select 21 credits that relate to or support the outcomes of one of the following areas:

Cultural Anthropology
Archaeology and Biological Anthropology
Applied Anthropology
Subtotal

21

## Experiential Learning Activities

Complete 40 hours of experiential learning activities which are approved by the Academic Adviser. Please consult with your Adviser for details of the options available.

<b>Total Hours</b>	<b>42</b>
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<sup>1</sup> Course counts for 50% of Major requirements and Major GPA.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Internships
5. Experiential Learning (Practice experience outside the classroom)

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

INTERDISCIPLINARY PROGRAMS - BS (5198)

Concentration in Anthropology (ANTH)

This program is effective as of Fall 2020



Revised 10.15.20  
UCC 03.03.20

# Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Cognitive Science

## Related Links

Interdisciplinary Programs - Cognitive Science, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/cognitive-science-interdisciplinary-programs/>)

Interdisciplinary Program Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/interdisciplinary-programs/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	42
	Electives	36

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

#### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3

<i>Natural Science Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
Subtotal		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

### Major Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above (Adviser approved courses)
- Courses used in this major may not be used to satisfy ROCK Studies 2, a minor, or another major's requirements.

- AP, Credit by Exam, CLEP, and institutional credit by exam may count towards the degree to a maximum of 45 credits. Pass/Fail and non-credit courses will not be counted in the major.

Code	Title	Hours
<b>Core Courses</b>		
Select 18 credits, at least three credits in each of the following areas:		18
<i>Oral and Written Communication</i>		
LEAD 144	Introduction to Cognitive Studies	
LEAD 215	Introduction to Consciousness	
<i>Interpersonal Skills and Civic Responsibility</i>		
LEAD 344	Left and Right Brain: From Neuron to Culture	
LEAD 244	Artificial Intelligence in Cognitive Studies and Film	
LEAD 315	Mindfulness and Brain	
<i>Analytical, Quantitative &amp; Critical Thinking Skills</i>		
LEAD 456	Research in Cognitive Science	
INDP 317	Statistics for the Social Sciences	
INDP 318	Research Methods in Interdisciplinary Studies	
Subtotal		18
<b>Emphasis Area</b>		
Select 24 credits from any of the following categories, must take at least one course from each area:		24
<i>Mind and Brain</i>		
BIOL 102		
LEAD 344	Left and Right Brain: From Neuron to Culture	
PHIL 351	Philosophy of Natural Science	
INDP 202	Introduction to Anthropology	
INDP 211	Biological Anthropology	
LEAD 315	Mindfulness and Brain	
<i>Intelligence, Perception and Technology</i>		
CPSC 130	Introduction to Computing and Programming	
LEAD 244	Artificial Intelligence in Cognitive Studies and Film	
CPSC 146	Programming Principles	
ENGL 230	Introduction to Linguistics and Grammar	
PHIL 113	Formal Logic	
CPSC 300	Challenges of Computer Technology	
<i>Consciousness, Self and Other</i>		
COMM 217	Intercultural Communication	
LEAD 350	Multicultural Leadership	
INDP 326	Society, Culture and Self	
LEAD 352	Self Leadership	
COMM 314	Interpersonal Communication	
PHIL 123	Ethics	
INDP 327	Religion and Society	
PHIL 343	Asian Philosophy	
LEAD 215	Introduction to Consciousness	
Subtotal		24

### Experiential Learning Activities

Must complete 40 hours of experiential learning activities which are approved by the Academic Adviser. Please consult with your Adviser for details of the options available.

<b>Total Hours</b>	<b>42</b>
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<sup>1</sup> Course counts for 50% of Major requirements and Major GPA.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Internships
5. Experiential Learning (Practice experience outside the classroom)

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

INTERDISCIPLINARY PROGRAMS - BS (5198)

Concentration in Cognitive Science (COSC)

This program is effective as of Fall 2020.

Revised 10.15.20

UCC 10.15.19

## Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Cultural Area Studies

### CULTURAL AREA STUDIES AT SRU

The curriculum in this program will provide students the opportunity to connect with other cultures, understand global issues, and correlate what they learn in the classroom to global and local settings. Among the fields studied: history, politics, languages, anthropology, philosophy, the arts and literature. Students will have diverse experiences, and through internships, take part in international travel and study to apply what they've learned to real-world situations. Students can choose to study American studies, Asian studies, European studies, Latin-American studies and Middle East studies. This program is designed to take a multi-disciplinary and integrative approach to learning. Students will learn how societies and cultures develop, grow, change and interact within and between other societies. Cultural sensitivity and literacy, including

language skills, are important areas that will be developed through an interdisciplinary curriculum that emphasizes theoretical classroom knowledge that is applied through student faculty research, internships, and practicums, and international travel and study. An integrative research project is a capstone experience required of all students. This project will build upon experiences inside and outside the classroom and integrate classroom theory and application.

WHAT CAN I DO WITH A CULTURAL AREA STUDIES DEGREE?

With a degree in cultural area studies, students will be well-positioned to embark on a wide variety of careers, including international non-governmental organizations and international nonprofit agencies, airline and travel, teacher/professor, international law, environmental agencies, business, health and education, diplomatic positions and more.

Related Links

- Interdisciplinary Programs - Cultural Area Studies, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/cultural-area-studies/>)
- Interdisciplinary Program Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/interdisciplinary-programs/>)
- Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

Curriculum Guide  
GPA Requirement

Major GPA: 2.0 or higher  
Overall GPA: 2.0 or higher

Summary\*

Code	Title	Hours
Rock Studies 2 Requirements		42
Other Basic Requirements		0-3
Computer Competency		0-3
Major/Concentration Requirements		42
Electives		36

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies 2 Requirements

Code	Title	Hours
The Rock		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

Integrated Inquiry

Creative and Aesthetic Inquiry		
Select 3 Credits (p. 29)		3
Humanities Inquiry		
Select 3 Credits (p. 29)		3
Social Science Inquiry		
Select 3 Credits (p. 29)		3
Natural Science Inquiry		
SCI 101	Science of Life	3
Physical Science Inquiry		
SCI 102	Understanding the Physical World	3
Subtotal		15
Thematic Thread		
Select 12 Credits (p. 29) <sup>2</sup>		12
Subtotal		12
Total Hours		42

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.
- <sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
Total Hours		0-3

Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
Total Hours		0-3

DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## major Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above (Adviser approved courses)
- Courses used in this major may not be used to satisfy ROCK Studies 2, a minor, or another major's requirements.
- AP, Credit by Exam, CLEP, and institutional credit by exam may count towards the degree to a maximum of 45 credits. Pass/Fail and non-credit courses will not be counted in the major.

Code	Title	Hours
<b>Core Courses</b>		
<i>Oral and Written Communication</i>		
INDP 499	Capstone: Applied Interdisciplinary Studies	3
Select one the following:		3
COMM 217	Intercultural Communication <sup>1</sup>	
GES 105	World Regional Geography <sup>1</sup>	
POLS 103	International Relations <sup>1</sup>	
Subtotal		6
<i>Interpersonal Skills and Civic Responsibility</i> <sup>2</sup>		
Select one of the following: <sup>3</sup>		3
Modern Language Course		
Hist & Dev Eng Lang (Amer. St. only)		
Select one of the following: <sup>4</sup>		3
Modern Language Course		
By advisement (American Studies only)		
Subtotal		6
<i>Analytical, Quantitative &amp; Critical Thinking Skills</i>		
Select one of the following courses approved for your cultural area:		3
HIST 151	Ancient World to the Age of Global Encounters <sup>1</sup>	
HIST 152	Early Modern to Contemporary World <sup>1</sup>	
INDP 106	Race and Ethnic Diversity in the USA <sup>1</sup>	
INDP 310	Cultural Area Studies <sup>1</sup>	
INDP 322	Archaeology of the Americas <sup>1</sup>	
MODL 105	Introduction to Asian Civilizations <sup>1</sup>	
Subtotal		3
<i>Required</i>		
INDP 102	Introduction to Interdisciplinary Studies	3
INDP 318	Research Methods in Interdisciplinary Studies <sup>1</sup>	3
Subtotal		6
<b>Emphasis Area</b>		
Courses selected by advisement		
<i>Cultural Area - America, Asia, Europe, Latin America or Middle East</i>		
Select 21 credits from the following categories: Foundations, Culture and Society, History, Current Issues		21
Subtotal		21
<b>Experiential Learning Activities</b>		

Must complete 40 hours of experiential learning activities which are approved by the Academic Adviser. Please consult with your Adviser for details of the options available.

### Total Hours

42

- 1 Course counts for 50% of Major requirements and Major GPA.
- 2 Take Modern Language courses at the 102 and 103, approved for your cultural area. American studies students must take ENGL 331 and another course by advisement.
- 3 ARAB, CHIN, FREN, JAPN, KORN, SPAN 102 or ENGL 331.
- 4 ARAB, CHIN, FREN, JAPN, KORN, SPAN 103 or Approved course.
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Internships
5. Experiential Learning (Practice experience outside the classroom)

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

INTERDISCIPLINARY PROGRAMS - BS (5198)

Concentration in Cultural Area Studies (CULT)

This program is effective as of Fall 2020

Revised 06.29.2022

UCC 03.05.20

## Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Gender and Diversity Studies

Gender is political. It's cultural. It's complex. Whether we recognize it or not, we experience, reinforce and disrupt social expectations about masculinity, femininity, sex, sexuality, and sexual identities every day. A host of other identity categories (age, race, ability and disability, size, ethnicity, and class, among others) also contribute to how we experience "gender."

SRU offers a concentration in Gender and Diversity Studies in the department of Nonprofit Management, Empowerment and Diversity

Studies and a minor in Gender Studies that explores these intersections and analyzes the messy but also fascinating concepts of gender and diversity within a social justice context. Both the major and minor are interdisciplinary, pulling from courses and departments from across the university, and thus both complement and enrich every major and minor. One question we're often asked is whether or not men can or should adopt the major or the minor. Absolutely!

The major and minor enhance every field, from Psychology to Education to Management and Marketing to Biology. Knowing more about how to navigate and better understand diversity in a respectful way not only contributes to future professional and graduate study success but helps make our world a kinder, more inclusive and equitable place.

## Related Links

Interdisciplinary Programs - Gender and Diversity Studies, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/gender-and-diversity-studies-interdisciplinary-programs/>)

Interdisciplinary Program Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/interdisciplinary-programs/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirments	0-3
	Computer Competency	1-3
	Major/Concentration Requirements	42
	Electives	36

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3

<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Science Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
Subtotal		12
<b>Total Hours</b>		<b>42</b>

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.
- <sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.



## Major Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above (Adviser approved courses)
- Courses used in this major may not be used to satisfy ROCK Studies 2, a minor, or another major's requirements.
- AP, Credit by Exam, CLEP, and institutional credit by exam may count towards the degree to a maximum of 45 credits. Pass/Fail and non-credit courses will not be counted in the major.

Code	Title	Hours
<b>Core Courses</b>		
<i>Oral and Written Communication</i>		
GNDR 115	Introduction to Gender Studies <sup>1</sup>	3
INDP 499	Capstone: Applied Interdisciplinary Studies	3
<i>Interpersonal Skills and Civic Responsibility</i>		
Select six credits from the following and by advisement:		6
ENGL 242	African-American Literature <sup>1</sup>	
ENGL 244	Native American Literature <sup>1</sup>	
ENGL 248	Asian Literature <sup>1</sup>	
GNDR 120	Introduction to the Study of Masculinities <sup>1</sup>	
HLTH 211	Women's Health Issues <sup>1</sup>	
INDP 339	Gender Roles and Society	
PHIL 140	World Religions <sup>1</sup>	
POLS 356	Gay and Lesbian Politics <sup>1</sup>	
PSYC 240	Human Sexual Behavior <sup>1</sup>	
Approved Course		
<i>Analytical, Quantitative &amp; Critical Thinking Skills</i>		
Select nine credits from the following and by advisement:		9
GNDR 415	Feminist Perspectives in the Disciplines <sup>1</sup>	
INDP 102	Introduction to Interdisciplinary Studies	
INDP 318	Research Methods in Interdisciplinary Studies	
DEPT XXX	Departmental Approved Course	
Subtotal		21
<b>Emphasis Area</b>		
<i>Primary Emphasis – Gender or Diversity</i>		
Select 21 credits in the following categories (by advisement):		21
Foundations		
Culture and Society		
History		
Current Issues		
<b>Experiential Learning Activities</b>		
Must complete 40 hours of experiential learning activities which are approved by the Academic Adviser. Please consult with your Adviser for details of the options available.		
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Internships
5. Experiential Learning (Practice experience outside the classroom)

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

INTERDISCIPLINARY PROGRAMS - BS (5198)

Concentration in Gender and Diversity Studies (GNDR)

This program is effective as of Fall 2020

Revised 10.15.20

UCC 03.03.20

## Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Leadership Studies

### Related Links

Interdisciplinary Programs - Leadership Studies, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/leadership-studies/>)

Interdisciplinary Program Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/interdisciplinary-programs/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3

Major/Concentration Requirements	42
Electives	36

\* All undergraduate degree programs require a minimum of 120 credits.  
Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Science Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
Subtotal		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above (Adviser approved courses)
- Courses used in this major may not be used to satisfy ROCK Studies 2, a minor, or another major's requirements.
- AP, Credit by Exam, CLEP, and institutional credit by exam may count towards the degree to a maximum of 45 credits. Pass/Fail and non-credit courses will not be counted in the major.

Code	Title	Hours
<b>Core Courses</b>		
<i>Oral and Written Communication</i>		
Select two of the following:		6
LEAD 251	Leadership Theory <sup>1</sup>	
LEAD 354	Strategic Planning and Decision Making for Leaders	
MS 102	Principles of Leadership	
MS 301	Fundamentals of Tactical Operations	
<i>Interpersonal Skills and Civic Responsibility</i>		
Select two of the following:		6
LEAD 350	Multicultural Leadership	
LEAD 352	Self Leadership	
LEAD 353	Teambuilding for Leaders	
<i>Analytical, Quantitative &amp; Critical Thinking Skills</i>		
Select two of the following:		6
LEAD 351	Leadership Practicum <sup>1</sup>	
INDP 317	Statistics for the Social Sciences	
INDP 318	Research Methods in Interdisciplinary Studies	
Subtotal		18
<b>Emphasis Area</b>		
Select at least one course in each of the following areas for a total of 24 credits:		24
<i>Area A - Self Leadership</i>		
COMM 314	Interpersonal Communication	

CSS 354	Risk Assessment and Fraud Prevention
NLPA 305	Financial Best Practices for Decision Makers
LEAD 215	Introduction to Consciousness
INDP 326	Society, Culture and Self
LEAD 352	Self Leadership
PHIL 123	Ethics
MS 201	Basic Military Skills
MS 202	Intermediate Military Skills

**Area B - Group Leadership**

COMM 215	Small Group Communication
INDP 310	Cultural Area Studies
INDP 321	Minority Groups
INDP 339	Gender Roles and Society
LEAD 344	Left and Right Brain: From Neuron to Culture
LEAD 350	Multicultural Leadership
LEAD 353	Teambuilding for Leaders
MGMT 351	Organizational Behavior
MS 301	Fundamentals of Tactical Operations
MS 302	Advanced Military Skills
PCRM 342	Group Facilitation and Leadership

**Area C - Organizational Leadership**

COMM 217	Intercultural Communication
COMM 315	Organizational Communication
CSS 352	Law & Ethics in the Workplace
NLPA 120	Civic Engagement and Community Decision-Making
INDP 348	Sociology of Organizations
LEAD 144	Introduction to Cognitive Studies
LEAD 354	Strategic Planning and Decision Making for Leaders
MGMT 341	Organizational Leadership
MS 401	Leadership Dimensions and Concepts
MS 402	Officership and the Profession of Arms

**Area D - Leadership Experience**

LEAD 351	Leadership Practicum
LEAD 355	Leadership Development Course
LEAD 450	Internship
MS 250	ROTC Basic Leadership Practicum
MS 350	ROTC Advanced Leadership Practicum

Subtotal	24
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**Experiential Learning Activities**

Students must complete 40 hours of experiential learning activities which are fulfilled by section D above or an approved substitution by the Academic Adviser. Please consult with your Adviser for details of the options available.

<b>Total Hours</b>	<b>42</b>
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<sup>1</sup> Course counts for 50% of Major requirements and Major GPA.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**Co-curricular and Experiential Learning**

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Internships
5. Experiential Learning (Practice experience outside the classroom)

**Important Curriculum Guide Notes**

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

INTERDISCIPLINARY PROGRAMS - BS (5198)

Concentration in Leadership Studies (LDRS)

This program is effective as of Fall 2020.

Revised 07.28.21

UCC 03.14.21

**Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Leadership Studies - Online Degree Completion Program**

This academic **online degree completion program** is designed for experienced college students, **who have completed some coursework and proven their ability to succeed at the college level**. Specifically, the Leadership Studies program provides a strong foundation for work in any employment sector. The curriculum includes coursework to help students make decisions and problem-solve, analyze data, work in a team environment, professionally communicate and manage time and proficiently organize the work environment.

Admission requirements for this program are as follows:

- Applicants must hold an associate degree from an SRU-recognized accredited program, which must include the equivalent of the following SRU courses:
  - English Writing Proficiency: Students must transfer the equivalency of SRU's ENGL 102,
  - Math Proficiency: Students must transfer the equivalency of SRU's ESAP 110, or a higher level Math,
  - Computer Competency: Students must transfer the equivalency of SRU's CPSC 110,
- Applicants must have earned a cumulative GPA of 2.0 or higher from all post-secondary institutions attended.

- Applicants must be in good academic standing at most recent institution attended.

Applicants, who do not hold a recognized associate degree but have earned 60 or more college credits including sufficient Rock Studies coursework, may be considered for the program. Recognition of the program and eligibility for program admission is determined by the Transfer Admissions office.

## Related Links

Online Degree Completion Undergraduate Programs Page (<https://www.sru.edu/academics/online-learning/online-degree-completion-ug-programs/>)

Interdisciplinary Program Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/interdisciplinary-programs/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher  
Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	42
	Electives	36

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
	Complete 42 SRU Rock Studies 2-based credits	42
<b>Total Hours</b>		<b>42</b>

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
	Complete one of the following:	0-3
	Meet required minimum SAT or ACT math score OR	
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
	Demonstrate "computer competency" by one of the following:	0-3
	Pass Computer Competency Exam OR	

Select one of the following at SRU or another post-secondary institution:

CPSC 100	Introduction to Computing for Liberal Arts
CPSC 110	Computer Concepts
CPSC 130	Introduction to Computing and Programming
PE 202	Technology for Wellness

**Total Hours** **0-3**

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

### Major Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above (Adviser approved courses)

Code	Title	Hours
<b>Core Courses</b>		
<i>Oral and Written Communication</i>		
Select at least six credits from the following:		6
LEAD 251	Leadership Theory	
LEAD 354	Strategic Planning and Decision Making for Leaders	
<i>Interpersonal Skills and Civic Responsibility</i>		
Select at least six credits from the following:		6
LEAD 350	Multicultural Leadership	
LEAD 352	Self Leadership	
LEAD 353	Teambuilding for Leaders	
<i>Analytical, Quantitative &amp; Critical Thinking Skills</i>		
Select at least six credits from the following:		6
INDP 317	Statistics for the Social Sciences	
LEAD 253	Online Practical Research	
Subtotal		18
<b>Emphasis Area</b>		
Select at least one course in each of the following areas for a total of 24 credits:		24
<i>Area A - Leading Self</i>		
CSS 354	Risk Assessment and Fraud Prevention	
NLPA 305	Financial Best Practices for Decision Makers	
LEAD 352	Self Leadership	
<i>Area B - Leading Others</i>		
INDP 310	Cultural Area Studies	
INDP 321	Minority Groups	
LEAD 350	Multicultural Leadership	
LEAD 353	Teambuilding for Leaders	
MGMT 351	Organizational Behavior	
<i>Area C - Leading Organizations</i>		
COMM 217	Intercultural Communication	
CSS 352	Law & Ethics in the Workplace	

NLPA 120	Civic Engagement and Community Decision-Making	
INDP 348	Sociology of Organizations	
LEAD 144	Introduction to Cognitive Studies	
LEAD 354	Strategic Planning and Decision Making for Leaders	
MGMT 341	Organizational Leadership	
<b>Area D - Leadership Experience</b>		
LEAD 253	Online Practical Research	
LEAD 450	Internship	
Subtotal		24

#### Experiential Learning Activities

Must complete 40 hours of experiential learning activities which are fulfilled by section D above or an approved substitution by the Academic Adviser. Please consult with your Adviser for available options.

**Total Hours** 42

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Internships
5. Experiential Learning (Practice experience outside the classroom)

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

INTERDISCIPLINARY PROGRAMS - BS (5197)  
Concentration in Leadership Studies (Online) (LS00)  
This program is effective as of Fall 2020.  
Revised 07.29.21  
UCC 04.13.21

# Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Liberal Arts

The BS in Interdisciplinary Programs is an outcome based degree, drawing from the richness of a liberal arts based education, which provides opportunities for students to develop an interdisciplinary educational program of study in consultation with their adviser. Students select courses that demonstrate competency in the following three areas:

- Oral and Written Communications
- Interpersonal Skills and Civic Responsibility
- Quantitative, Analytical, and Critical Thinking Skills

Students will also demonstrate, through courses or non-credit experiences, that they have had experiential learning experiences related to their course of study. The specific courses used to meet these degree requirements vary with each student. The courses selected to meet the above listed outcomes are based upon the academic emphasis identified by the student for their program of study and are approved by their academic adviser.

What can students study with this degree? The degree provides three types of academic opportunities. The first, degree completion, provides opportunities for students to graduate with a program of study that builds upon their prior educational experiences when they find they are unable to complete their current degree program. The second allows students, with their adviser, to develop a self-designed program of study in the following areas:

- Sociology
- Anthropology
- Asian Studies
- Non-Profit Leadership
- Fraud
- Pre-Law and other Pre-Professional Programs

The department also offers a number of minors in the following areas: Sociology, Anthropology, Non-Profit Leadership, and Leadership.

All students must have a 2.00 GPA and have earned 30 credits before they can be accepted into the degree program. Minors do not carry these requirements. New students to the university can select this degree, but will start their program of study in the Exploratory Program while having faculty from the Department of Interdisciplinary Programs serve as their advisers. Once the degree entry requirements are met the students formally move into the degree program.

The BS in Interdisciplinary Programs affords students opportunities to be flexible and creative in designing their program of study. Students who want to integrate more than one area of study in ways not found in Slippery Rock's traditional majors may consider this degree. Students with a specific career or professional interest, an interest in graduate school or a graduate level professional program that has certain competencies, but does not require a specific undergraduate major, may find this degree appropriate for them. This degree is also valuable as a second major for students who want more than a minor to their program of study.



Related Links

Interdisciplinary Programs- Liberal Arts, BS Program Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/interdisciplinary-programs/programs/>)

Interdisciplinary Program Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/interdisciplinary-programs/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

Curriculum Guide

GPA Requirement

Major GPA: 2.0 or higher  
Overall GPA: 2.0 or higher

Summary\*

Code	Title	Hours
Rock Studies 2 Requirements		42
Other Basic Requirments		0-3
Computer Competency		0-3
Major/Concentration Requirements		42
Electives		36

\* All undergraduate degree programs require a minimum of 120 credits.  
Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Science Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12

Subtotal	12
<b>Total Hours</b>	<b>42</b>

- 1
- Course offered in multiple subjects; cannot take course in first major subject.
- 2
- One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

Major Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above (Adviser approved courses)
- Courses used in this major may not be used to satisfy ROCK Studies 2, a minor, or another major's requirements.
- AP, Credit by Exam, CLEP, and institutional credit by exam may count towards the degree to a maximum of 45 credits. Pass/Fail and non-credit courses will not be counted in the major.

Code	Title	Hours
<b>Core Courses</b>		
<i>Oral and Written Communication</i>		
Select at least six credits		6
<i>Interpersonal Skills and Civic Responsibility</i>		

Select at least six credits	6
<i>Analytical, Quantitative &amp; Critical Thinking Skills</i>	
Select at least six credits	6
Subtotal	18
<b>Emphasis Area</b>	
Select 24 credits related to or that support the outcomes of the Emphasis Area developed with the Academic Adviser	24
Subtotal	24
<b>Experiential Learning Activities</b>	
Must complete 40 hours of experiential learning activities which are approved by the Academic Adviser. Please consult with your Adviser for details of the options available.	
<b>Total Hours</b>	<b>42</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Internships
5. Experiential Learning (Practice experience outside the classroom)

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

INTERDISCIPLINARY PROGRAMS - BS (5198)

Concentration in Liberal Arts (LART)

This program is effective as of Fall 2019.

Revised 10.15.2020

UCC RISP 2019

# Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Liberal Arts - Online Degree Completion Program

This academic **online degree completion program** is designed for experienced college students, **who have completed some coursework and proven their ability to succeed at the college level**. Specifically, the program allows a student the opportunity to work with a faculty adviser

to create an individualized program that makes best use of already earned credits, while striving to facilitate unique interests and goals.

To be considered for admission to this program, students must hold an associate degree from an SRU-recognized accredited program or have earned approximately 60 college credits, which must include the following:

- Approximately 27-30 credits must be considered to be SRU Rock Studies 2 Requirement courses,
- English Writing Proficiency: Students must already earned the equivalency of SRU's ENGL 102,
- Math Proficiency: Students must have already earned the equivalent of SRU's ESAP 110,
- Computer Competency: Students must have earned the equivalency of SRU's CPSC 110,
- GPA Requirement: Students must have earned a cumulative GPA of 2.0 or higher from all post-secondary institutions attended.

Student must be in good academic standing at most recent institution attended.

Applicants, who do not hold a recognized associate degree but have earned 60 or more college credits including sufficient Rock Studies coursework (27-30 credits,) may be considered for the program. Recognition of the program and eligibility for program admission is determined by the Transfer Admissions office.

## Related Links

Online Degree Completion Undergraduate Programs Page (<https://www.sru.edu/academics/online-learning/online-degree-completion-ug-programs/>)

Interdisciplinary Program Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/interdisciplinary-programs/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	42
	Electives	36

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
Complete 42 SRU Rock Studies 2-based credits		42
<b>Total Hours</b>		<b>42</b>

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Core Courses</b>		
<i>Oral and Written Communication</i>		
Select six credits approved through faculty advisement		6
<i>Interpersonal Skills and Civic Responsibility</i>		
Select six credits approved through faculty advisement		6
<i>Analytical, Quantitative &amp; Critical Thinking Skills</i>		
Select six credits approved through faculty advisement		6
Subtotal		18
<b>Emphasis Area</b>		
Select 24 credits approved through faculty advisement		24
Subtotal		24
<b>Experiential Learning Activities</b>		

Must complete 40 hours of experiential learning activities, which are explained and approved through faculty advisement.

<b>Total Hours</b>	<b>42</b>
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- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Graduation Requirements

Students must meet all Graduation Requirements as delineated in the University catalog, including the following requirement that should be considered as students are transferring credits and choosing SRU coursework. Students must complete 48 credits of upper-level coursework. Thirty-nine of the 48 credits must be at the 300 level or higher; the additional 9 credits may include courses requiring a 3 credit prerequisite. At least 24 of the 48 credits must be completed at SRU.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Internships
5. Experiential Learning (Practice experience outside the classroom)

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

INTERDISCIPLINARY PROGRAMS - BS (5198)

Concentration in Liberal Arts (LARO)

This program is effective as of Fall 2019.

Revised 7-2019

UCC RISP 2019

# Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Philanthropy and Nonprofit Management

## Related Links

Interdisciplinary Programs - Philanthropy and Nonprofit Management, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/philanthropy-and-nonprofit-management/>)

Interdisciplinary Program Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/interdisciplinary-programs/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
Rock Studies 2 Requirements		42
Other Basic Requirements		0-3
Computer Competency		0-3
Major/Concentration Requirements		42
Electives		36

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Science Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
Subtotal		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

### Major Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above (Adviser approved courses)
- Courses used in this major may not be used to satisfy ROCK Studies 2, a minor, or another major's requirements.
- AP, Credit by Exam, CLEP, and institutional credit by exam may count towards the degree to a maximum of 45 credits. Pass/Fail and non-credit courses will not be counted in the major.

Code	Title	Hours
<b>Core Courses</b>		
<i>Oral and Written Communication</i>		
Select at least six credits from the following:		6
NLPA 220	Introduction to Nonprofit Management <sup>1</sup>	
ENGL 205	Introduction to Professional Writing <sup>1</sup>	
COMM 231	Principles of Integrated Marketing Communication & Public Relations <sup>1</sup>	

*Interpersonal Skills and Civic Responsibility*

NLPA 120	Civic Engagement and Community Decision-Making <sup>1</sup>	3
NLPA 320	Community Change and Development <sup>1</sup>	3
<i>Analytical, Quantitative &amp; Critical Thinking Skills</i>		
NLPA 305	Financial Best Practices for Decision Makers <sup>1</sup>	3
NLPA 325	Social and Ethical Issues in Philanthropy and Fundraising <sup>1</sup>	3
Subtotal		18
<b>Emphasis Area</b>		
Select 24 credits from the following and selected through advisement:		24
NLPA 450	Internship <sup>1</sup>	
Internship Placement and Nonprofit Specialty area		
Subtotal		24
<b>Experiential Learning Activities</b>		
Must complete 40 hours of experiential learning activities, which are approved by the Academic Adviser. Please consult with your Adviser for details of the options available.		
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Student leadership development through the Student Nonprofit Alliance
5. Co-curricular opportunities to plan, manage and evaluate nonprofit professionals
6. Service-learning experiences with nonprofit and other community organizations
7. Networking opportunities with SRU students, alums and other nonprofit professionals
8. Opportunities to attend regional and national workshops and conferences
9. Affiliation with nonprofit professional associations
10. Internships
11. Career education and development

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information*

*on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

INTERDISCIPLINARY PROGRAMS - BS (5198)

Concentration in Philanthropy and Nonprofit Management (PNPM)

This program is effective as of Fall 2020.

Revised 10.15.20

UCC 10.15.19

# Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Philanthropy and Nonprofit Management - Online Degree Completion Program

This academic **online degree completion program** is designed for experienced college students, **who have completed some coursework and proven their ability to succeed at the college level**. Specifically, this program provides a strong foundation for those who plan to work in the nonprofit sector and need to develop expertise in how to develop and manage programs, measure organizational effectiveness, generate funds through grants and special events, prepare budgets and maintain financial records, develop marketing tools and public relations materials, recruit and supervise volunteers, advocate for the needs of clients, and conduct human resources functions like hiring and evaluating staff.

Admission requirements for this program are as follows:

- To be considered for admission to this program, applicants must hold an associate degree from an SRU-recognized accredited program, which must include the equivalent of the following SRU courses:
  - English Writing Proficiency: Students must transfer the equivalency of SRU's ENGL 102,
  - Math Proficiency: Students must transfer the equivalency of SRU's ESAP 110,
  - Computer Competency: Applicants must transfer the equivalency of SRU's CPSC 110,
- GPA Requirement: Applicants must have earned a cumulative GPA of 2.0 or higher from all post-secondary institutions attended.
- Applicants must be in good academic standing at most recent institution attended.

Applicants, who do not hold a recognized associate degree but have earned 60 or more college credits including sufficient Rock Studies 2 coursework (27-30 credits,) may be considered for the program. Recognition of the program and eligibility for program admission is determined by the Transfer Admissions office.

## Related Links

Online Degree Completion Undergraduate Programs Page (<https://www.sru.edu/academics/online-learning/online-degree-completion-ug-programs/>)

Interdisciplinary Program Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/interdisciplinary-programs/>)



Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	42
	Electives	36

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Online program students must complete a sum total of 42 SRU Rock Studies 2-based credits; there are no specific requirements

Code	Title	Hours
	Complete 45 SRU Rock Studies 2-based credits	45
<b>Total Hours</b>		<b>45</b>

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
	Complete one of the following:	0-3
	Meet required minimum SAT or ACT math score OR	
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
	Demonstrate "computer competency" by one of the following:	0-3
	Pass Computer Competency Exam OR	
	Select one of the following at SRU or another post-secondary institution:	
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this

requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

### Major Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above (Adviser approved courses)

Code	Title	Hours
<b>Core Courses</b>		
<i>Oral and Written Communication</i>		
NLPA 220	Introduction to Nonprofit Management <sup>1</sup>	3
ENGL 365	Writing for the World Wide Web <sup>1</sup>	3
<i>Interpersonal Skills and Civic Responsibility</i>		
NLPA 120	Civic Engagement and Community Decision-Making <sup>1</sup>	3
NLPA 320	Community Change and Development <sup>1</sup>	3
<i>Analytical, Quantitative &amp; Critical Thinking Skills</i>		
NLPA 305	Financial Best Practices for Decision Makers <sup>1</sup>	3
NLPA 325	Social and Ethical Issues in Philanthropy and Fundraising <sup>1</sup>	3
Subtotal		18
<b>Emphasis Area</b>		
Select 24 credits from the following:		24
NLPA 450	Internship <sup>1</sup>	
Emphasis course by Advisement		
Emphasis course by Advisement		
Emphasis course by Advisement		
Emphasis course by Advisement		
Emphasis course by Advisement		
Emphasis course by Advisement		
Emphasis course by Advisement		
Subtotal		24
<b>Experiential Learning Activities</b>		
Complete 40 hours of experiential learning activities, which are approved by the Academic Adviser. Please consult with your Adviser for details of the options available.		
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Graduation Requirements

Students must meet all Graduation Requirements as delineated in the University catalog, including the following requirement that should be considered as students are transferring credits and choosing SRU coursework.

- Students must complete 48 credits of upper-level coursework. Thirty-nine of the 48 credits must be at the 300 level or higher; the additional 9 credits may include courses requiring a 3 credit prerequisite. At least 24 of the 48 credits must be completed at SRU.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Internships
5. Experiential Learning (Practice experience outside the classroom)

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

INTERDISCIPLINARY PROGRAMS - BS (5198)

Concentration in Philanthropy and Nonprofit Management (PNPM)

This program is effective as of Fall 2020.

Revised 10.15.20

UCC 10.15.19

# Interdisciplinary Programs, Bachelor of Science (BS) - Concentration in Sociology

## Related Links

Interdisciplinary Programs - Sociology, BS Program Page (<https://www.sru.edu/academics/majors-and-minors/sociology/>)

Interdisciplinary Program Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/interdisciplinary-programs/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirements	0-3
	Computer Competency	0-3

Major/Concentration Requirements	42
Electives	36

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Science Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<i>Thematic Thread</i>		
Select 12 Credits (p. 29) <sup>2</sup>		12
Subtotal		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above (Adviser approved courses)
- Courses used in this major may not be used to satisfy ROCK Studies 2, a minor, or another major's requirements.
- AP, Credit by Exam, CLEP, and institutional credit by exam may count towards the degree to a maximum of 45 credits. Pass/Fail and non-credit courses will not be counted in the major.

Code	Title	Hours
<b>Core Courses</b>		
<i>Oral and Written Communication</i>		
INDP 102	Introduction to Interdisciplinary Studies	3
INDP 201	Principles of Sociology	3
<i>Interpersonal Skills and Civic Responsibility</i>		
Select six credits from the following:		6
INDP 103	Contemporary Social Problems <sup>1</sup>	
INDP 106	Race and Ethnic Diversity in the USA <sup>1</sup>	
INDP 304	Urban Sociology	
INDP 326	Society, Culture and Self <sup>1</sup>	
INDP 330	Collective Behavior <sup>1</sup>	
<i>Analytical, Quantitative &amp; Critical Thinking Skills</i>		
INDP 317	Statistics for the Social Sciences <sup>1</sup>	3
INDP 318	Research Methods in Interdisciplinary Studies <sup>1</sup>	3
INDP 499	Capstone: Applied Interdisciplinary Studies	3
Subtotal		21
<b>Emphasis Area</b>		
Select 21 credits from the following by advisement:		21
General Sociology Concentration		
Applied Sociology interest areas for Medical Sociology and Public Sociology		
Subtotal		21
<b>Experiential Learning Activities</b>		

Must complete 40 hours of experiential learning activities which are approved by the Academic Adviser. Please consult with your Adviser for details of the options available.

**Total Hours** **42**

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty creative projects
4. Internships
5. Experiential Learning (Practice experience outside the classroom)

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

INTERDISCIPLINARY PROGRAMS - BS (5198)

Concentration in Sociology (SOCI)

This program is effective as of Fall 2020

Revised 10.15.20

UCC 03.05.20

## Managing Nonprofit Organizations Serving the LGBTQIA+ Community

To access Minor Requirements, please view the Curriculum Guide tab.

## RELATED LINKS

Managing LGBTQ+ Focused Nonprofit Organizations, Minor Program Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/nonprofit-management-empowerment-and-diversity-studies/programs/>)

Nonprofit Management, Empowerment, and Diversity Studies Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/nonprofit-management-empowerment-and-diversity-studies/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Certificate GPA: 2.0 or higher

### CERTIFICATE REQUIREMENTS

Code	Title	Hours
<b>Course Requirements</b>		
GNDR 115	Introduction to Gender Studies	3
GNDR 340	Applied Queer Studies	3
NLPA 120	Civic Engagement and Community Decision-Making	3
NLPA 220	Introduction to Nonprofit Management	3
NLPA 325	Social and Ethical Issues in Philanthropy and Fundraising	3
<b>Total Hours</b>		<b>15</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

CERTIFICATE IN MANAGING NONPROFIT ORG FOR LGBTQIA+(5MNP)

This program is effective as of Summer 2022

Revised 07.01.2022

UCC Spring 2021

## Philanthropy and Non-Profit Management, Certificate

To access Certificate Requirements, please view the Curriculum Guide tab.

### Related Links

Philanthropy and Nonprofit Management, Certificate Program Page (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/management-and-marketing/programs/>)

Management: General Management Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/management-and-marketing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Certificate GPA: 2.0 or higher

### Certificate Requirements

Code	Title	Hours
<b>Course Requirements</b>		
NLPA 120	Civic Engagement and Community Decision-Making	3
NLPA 220	Introduction to Nonprofit Management	3
NLPA 305	Financial Best Practices for Decision Makers	3
NLPA 320	Community Change and Development	3
NLPA 325	Social and Ethical Issues in Philanthropy and Fundraising	3
<b>Total Hours</b>		<b>15</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

CERTIFICATE Philanthropy and Nonprofit Management (5PNM)

This program is effective as of Spring 2019

Revised 10-2019

## Philanthropy and Nonprofit Management, Minor

The minor in philanthropy and nonprofit management is intended to be useful to those students who may choose to either follow a career path or a personal goal of working within a nonprofit, nongovernmental organizational context. These courses prepare students to meet professional demands of the nonprofit sector.

To access Minor Requirements, please view the Curriculum Guide tab.

### Related Links

Philanthropy and Nonprofit Management, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/philanthropy-and-nonprofit-management/>)

Management: General Management Department Page (<https://www.sru.edu/academics/colleges-and-departments/cob/school-of-business/management-and-marketing/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Courses</b>		
NLPA 220	Introduction to Nonprofit Management	3
NLPA 305	Financial Best Practices for Decision Makers	3
NLPA 320	Community Change and Development	3
NLPA 325	Social and Ethical Issues in Philanthropy and Fundraising	3
INDP 450	Internship	3
Select one of the following:		3
INDP 106	Race and Ethnic Diversity in the USA	
CDEV 248	Human Development and Education	
NLPA 120	Civic Engagement and Community Decision-Making	
<b>Total Hours</b>		<b>18</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

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PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN PHILANTHROPY AND NONPROFIT MANAGEMENT (73B)

This program is effective as of Fall 2015

Revised 8-2019

## Re-Entry Nonprofit Organization, Certificate

Students who complete this certificate of academic achievement will:

- Gain professional proficiency in the field of criminal justice (with additional emphasis on re-entry) and nonprofit leadership.

- Develop skills in critical thinking and synthesis and analysis of information pertaining to criminal justice, community policy making, nonprofit sector, resource development, and income generation.
- Understand the role of ethics and morality in criminal justice and the nonprofit sector.

Students can receive a document of academic achievement upon completion.

To access Certificate Requirements, please view the Curriculum Guide tab.

## Related Links

Non-Profit Management Certificate Program Page (<https://www.sru.edu/academics/certificates/nonprofit-management-certificate/>)

Interdisciplinary Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/interdisciplinary-programs/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Certificate GPA: 2.0 or higher

### Certificate Requirements

Code	Title	Hours
<b>Required Courses</b>		
CRIM 110	Introduction to Criminology & Criminal Justice Systems	3
CRIM 416	Community Corrections	3
NLPA 120	Civic Engagement and Community Decision-Making	3
NLPA 320	Community Change and Development	3
NLPA 325	Social and Ethical Issues in Philanthropy and Fundraising	3
<b>Total Hours</b>		<b>15</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

CERTIFICATE Academic Achievement in Re-Entry Nonprofit Organizations (5RNO)

This program is effective as of Spring 2019.



Revised 10-2019

# Sociology, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

The minor in sociology gives students the ability to understand the complexities of today’s society by examining human behavior and social actions. In examining how social structures (such as work, the family, religion, etc) help shape social rules, processes, and agency, students gain a better understanding of the complexity of today’s world—from poverty, to gender, to race, to organizational behavior, to politics and more. In studying social issues, students learn to use analytical and critical reasoning and apply sociological theories to explain a wide range of social phenomena.

## Related Links

Sociology Program Page (<https://www.sru.edu/academics/majors-and-minors/sociology/>)

Interdisciplinary Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/interdisciplinary-programs/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Core Courses</b>		
INDP 106	Race and Ethnic Diversity in the USA	3
INDP 201	Principles of Sociology	3
INDP 304	Urban Sociology	3
INDP 317	Statistics for the Social Sciences	3
<b>Elective Courses</b>		
Select two of the following:		6
INDP 226	Population and Society	
INDP 309	Health and Society	
INDP 321	Minority Groups	
INDP 324	The Family	
INDP 327	Religion and Society	
INDP 339	Gender Roles and Society	
<b>Total Hours</b>		<b>18</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN SOCIOLOGY(80C)  
This program is effective as of Fall 2009  
Revised 8-2019

## Writing for the Nonprofit Sector, Certificate

To access Certificate Requirements, please view the Curriculum Guide tab.

## Related Links

Writing for the Nonprofit Sector, Certificate Program Page (<https://www.sru.edu/academics/certificates/writing-for-the-nonprofit-sector-certificate/>)

Interdisciplinary Program Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/interdisciplinary-programs/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Certificate GPA: 2.0 or higher

### Certificate Requirements

Code	Title	Hours
<b>Required Courses</b>		
ENGL 205	Introduction to Professional Writing	3
NLPA 220	Introduction to Nonprofit Management	3
NLPA 325	Social and Ethical Issues in Philanthropy and Fundraising	3
Select two of the following:		6
ENGL 365	Writing for the World Wide Web	
ENGL 429	Grant and Proposal Writing	
NLPA 120	Civic Engagement and Community Decision-Making	
<b>Total Hours</b>		<b>15</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

CERTIFICATE in Writing for Nonprofit Sector (5WNS)

This program is effective as of Spring 2019

Revised 08.03.2021

## Philosophy

Chair	Secretary	Location	Department Phone
Dr. Lisa Schoenberg	Diane Robbins	302 Spotts World Culture Building	724-738-2071

Department Web Site URL (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/philosophy/>)

Department Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/philosophy-fs.pdf>)

## Faculty

### Andrew Colvin

Associate Professor

Philosophy

M.A., Ohio University

Ph.D., University of Hawaii

B.A., Ohio University

### Katherine Cooklin

Professor

Philosophy

Ph.D., University of Texas at Austin

M.S., Lewis and Clark College

B.A., University of Southern Maine

### Lisa Schoenberg

Associate Professor

Philosophy

Ph.D., Temple University

M.A., Temple University

B.A., Oberlin College

### Thomas Sparrow

Associate Professor

Philosophy

Ph.D., Duquesne University

M.A., West Chester University

B.A., East Stroudsburg University

## Programs

### Majors

- Philosophy, Bachelor of Arts (BA) (p. 1052)
- Philosophy, Bachelor of Arts (BA) - Concentration in Career-Related (p. 1055)

### Minors

- Ethics, Minor (p. 1051)
- Philosophy, Minor (p. 1057)

### Certificates

- Humanities and Health, Certificate (p. 1052)

## Courses

### PHIL 101 - Introduction to Philosophy

A first encounter with the nature and methods of philosophical thinking in which a person's view of his/her own nature and of the world becomes challenged, explored and deepened. Students read a diverse range of primary texts, both classical and contemporary, western and non-western. They may also view films and other media that present philosophical arguments.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

### PHIL 110 - Ethics and Civil Discourse

An introduction to the practice of civil discourse through a philosophical study of ethics from theoretical and applied perspectives.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

### PHIL 113 - Formal Logic

An introduction to the standards and methods of inference utilized in formal systems of logic including traditional syllogistic logic and modern propositional logic. Phil 113 is designed to improve students' ability to recognize fallacies in reasoning, to identify and make valid inferences, and to construct sound arguments.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

**PHIL 123 - Ethics**

An introduction to the study of questions concerning right action, moral obligation, and an examination of various theories of moral judgment. This course introduces students to the many forms of inquiry and analysis conducted in the humanities, especially philosophy, and the perennial questions that philosophy addresses. Students engage a diverse range of primary texts in ethics and ethical theory, both classical and contemporary, western and non-western. They also view and analyze films and other media that present ethical arguments.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

**PHIL 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**PHIL 140 - World Religions**

This course is designed to be a survey of religious traditions from across the globe and an exploration of their philosophies and world views. This course introduces students to the many forms of inquiry and analysis conducted in the humanities, especially religious studies and comparative religion. Students engage a range of primary and secondary texts to gain a comparative understanding of the world's religions.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

**PHIL 163 - Philosophy in Literature**

An examination of the philosophical content of poetry, prose, and film of exceptional literary and philosophical merit. This course introduces students to the many forms of inquiry and analysis conducted in the humanities, especially philosophy, and the perennial questions that philosophy addresses. Students engage a diverse range of literary texts, both classical and contemporary, western and non-western. They also view and analyze films and other media that present philosophical arguments.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**PHIL 170 - American Philosophy**

An investigation of the historical genesis of American culture through a reading of the prominent philosophical literature the culture has produced.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

**PHIL 171 - Philosophy of Human Existence**

An investigation into and discussion of the central themes of existential philosophy. Philosophers such as Kierkegaard and Nietzsche will be studied in terms of their retrieval of the meaning of human existence.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Thematic Thread(s): Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

**PHIL 180 - Philosophical Inquiry**

This course guides students through the method of philosophical inquiry by exploring philosophical problems and questions in the broader context of humanistic inquiry.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**PHIL 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PHIL 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**PHIL 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PHIL 261 - Philosophy of Art**

Exploration of basic issues and philosophical views of the experience of the arts. This course aims at the understanding and enhancement of the experience of the arts, and at a thoughtful appraisal of the role of art in life.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

**PHIL 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PHIL 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**PHIL 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PHIL 313 - Symbolic Logic**

An advanced investigation of logical thought through the use of special techniques of symbolization, the logic of unquantified and quantified propositions, the nature and limits of logical systems and the foundation of mathematics are some of the important topics considered.

Prerequisites: PHIL 113<sup>D</sup> or MATH 120<sup>D</sup> or MATH 199<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHIL 324 - Environmental Ethics**

An analysis of environmental issues using a philosophical understanding of nature, with a consideration of the ethical responsibilities in the use of the earth's resources, behavior toward non-human species, and obligations toward future generations.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHIL 325 - Medical/Health Care Ethics**

A course in applied ethics about conceptual, ethical, and legal dilemmas in the institutional rights of patients, in the responsibilities of practitioners, in technological challenges to values in the modern age in caring for the seriously ill and the dying, and in rationing health care in a large society.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHIL 326 - Business Ethics**

A study of applied ethics about the conceptual and ethical dilemmas in the business professions. An examination of cultural challenges of social and moral responsibility in a technically sophisticated economic climate.

Credits: 3

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHIL 331 - Social and Political Philosophy**

An in-depth study of central concepts and issues in social and political thought from multiple, diverse perspectives. Issues may include just and fair societies, theories of political obligation, and theories of citizenship and civic engagement with regard to diverse, heterogeneous communities.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Citizenship & Social Problems, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHIL 335 - Philosophy of Law and Justice**

A study of multiple theories of law and the nature of law's relation to justice with special emphasis on a notion of justice for institutions.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHIL 336 - Philosophy of Gender and Sex**

This course will examine concepts, values and assumptions relevant to gender and sex in our diverse society. topics to be explored may include the ontological status of gender and sex; the cultural representations of masculinity, femininity and sexuality; or the relationship between gender, society and power, and its epistemological and ethical consequences.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHIL 338 - Ethics, Technology, and the Future**

This course considers ethical, sociopolitical, epistemological, and metaphysical issues arising from the design and use of emerging technologies, including information technologies, robots and autonomous machines, neurological and implantable technologies, genetic engineering, and artificial intelligence, as well as the more speculative technologies of science fiction.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

### PHIL 341 - Philosophy of Religion

A critical inquiry into the nature and validity of religious belief and experience, its relation to other human interests, its diversity, and its contemporary significance.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### PHIL 343 - Asian Philosophy

An investigation of the central religions and philosophical ideas of Oriental cultures, focusing primarily on the cultures of India, China, Japan and Southeast Asia.

Credits: 3

Thematic Thread(s): Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### PHIL 351 - Philosophy of Natural Science

An in-depth examination of the nature of natural science, including its aims, methods, central concepts, and limits and a thoughtful appraisal of its significance for the modern age.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### PHIL 362 - Philosophy of Mind

This course considers philosophical perspectives on the nature of mind and its relation to the world. Topics covered include the mind-body problem, the nature of consciousness, personal identity and the nature of the self, free will and moral responsibility, and the implications of technology for the future of human consciousness.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Thematic Thread(s): Conservation, Technology & Imagination, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### PHIL 371 - Ancient Western Philosophy

A study of the major philosophers and schools of philosophy in the ancient Western world and their influence on the medieval period. The course examines basic questions and concepts in theory of knowledge, logic, ethics, politics, aesthetics, and metaphysics as found in the works of thinkers like Plato, Aristotle, the Presocratics, the Stoics, and the Epicureans. Students will consider how ancient philosophy continues to provide insight and inspiration in the contemporary world.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Thematic Thread(s): Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### PHIL 372 - Modern Western Philosophy

A study of Western philosophy from the Renaissance through the Age of Enlightenment and into the early nineteenth century, this course traces the basic concepts and problems of the period, especially problems of knowledge, ethics, and metaphysics. Students will consider the contribution of modern philosophers to the Scientific Revolution and to the development of the scientific method, as well as how modern philosophy continues to provide insight and inspiration in the contemporary world.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Thematic Thread(s): Citizenship & Social Problems, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### PHIL 373 - Modern Authors and Issues

Variable content within the modern contemporary period of philosophical thinking. Repeatable to 6 credits.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### PHIL 375 - Existentialism and Phenomenology

A study of important twentieth century philosophers in terms of their attempt to establish a new approach to philosophy and their reaction and attempt to overcome Western metaphysics.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### PHIL 376 - Analytic Philosophy

An examination of the development and influence of Anglo-American analytic philosophy in the twentieth century. The focus will be on how analytic philosophers have used logic, the analysis of language, and scientific methodology in approaching traditional philosophical questions.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### PHIL 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**PHIL 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHIL 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHIL 490 - Independent Study**

A special course designed primarily for students seeking knowledge in philosophy beyond course offerings. The student's interests, in consultation with department members, determines the topics covered. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHIL 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHIL 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Ethics, Minor

Philosophy encourages you to critically examine what passes as "common knowledge," formulate well-reasoned positions on important issues, and express your ideas clearly and carefully. The Philosophy program at SRU fosters excellence in reading, writing, critical thinking, and ethical deliberation. SRU philosophy students have won more top awards at the annual statewide Association for Philosophy and Religious Studies (IAPRS) than any other university within the PA State System of Higher Education.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Ethics, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/ethics-minor/>)

Philosophy Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/philosophy/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Courses</b>		
PHIL 113	Formal Logic	3
PHIL 123	Ethics	3
Select two of the following:		6
PHIL 324	Environmental Ethics	
PHIL 325	Medical/Health Care Ethics	
PHIL 326	Business Ethics	
PHIL 338	Ethics, Technology, and the Future	
Select one of the following:		3
PHIL 140	World Religions	
PHIL 163	Philosophy in Literature	
PHIL 170	American Philosophy	
PHIL 171	Philosophy of Human Existence	
Select one of the following courses (course cannot be reused from above):		3
PHIL 324	Environmental Ethics	
PHIL 325	Medical/Health Care Ethics	
PHIL 326	Business Ethics	
PHIL 331	Social and Political Philosophy	
PHIL 335	Philosophy of Law and Justice	
PHIL 336	Philosophy of Gender and Sex	
PHIL 338	Ethics, Technology, and the Future	
PHIL 343	Asian Philosophy	
<b>Total Hours</b>		<b>18</b>

- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum

categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN ETHICS (60B)

This program is effective as of Fall 2020.

Revised 12-2019

UCC 12.3.19

## Humanities and Health, Certificate

The Certificate in Health and Humanities is a 12-credit program that allows students in health-related programs an opportunity to integrate your health-related courses with humanities and better understand the ethical and cultural context of healthcare

To access Certificate Requirements, please view the Curriculum Guide tab.

### Related Links

Humanities and Health, Certificate Program Page (<https://www.sru.edu/academics/certificates/health-and-humanities-certificate/>)

Philosophy Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/philosophy/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

### Curriculum Guide

#### GPA Requirement

Certificate GPA: 2.0 or higher

#### Certificate Requirements

Code	Title	Hours
<b>Required Courses</b>		
PHIL 325	Medical/Health Care Ethics	3
INDP 309	Health and Society	3
Select two of the following:		6
HCAM 230	US Healthcare Systems	
HLTH 311	International Health	
HLTH 316	Human Sexuality	
<b>Total Hours</b>		<b>12</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information*

*on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

CERTIFICATE IN HUMANITIES & HEALTH (5HAH)

UCC 03.24.2015

Revised 09.1.2022

## Philosophy, Bachelor of Arts (BA)

### Program Learning Outcomes

- **Communication:** Students will express philosophical ideas in either oral or written format.
- **Degree Program Writing Competency:** Students will express philosophical ideas clearly and logically in written format.
- **Ethical Analysis:** Identify major ethical paradigms and analyze ethical issues with regard to them.
- **Problem Solving and Critical Thinking:** Break down complex ideas into their elements; perform reasoning tasks efficiently and correctly; clearly identify problems and solutions

### Related Links

Philosophy, Major Program Page (<https://www.sru.edu/academics/majors-and-minors/philosophy/>)

Philosophy Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/philosophy/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

### Curriculum Guide

#### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

#### Summary\*

Code	Title	Hours
Rock Studies 2 Requirements		42
Modern Language Requirement		0-9
Other Basic Requirements		0-3
Computer Competency		0-3
Major Requirements		33
Electives		45

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

#### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3

COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
Complete 0-9 credits		0-9
<b>Total Hours</b>		<b>0-9</b>

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	

CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major Requirements

- 17 major credits must be taken at SRU or PASSHE
- 17 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Core Requirements</b>		
Select one of the following:		3
PHIL 113	Formal Logic <sup>1</sup>	
PHIL 313	Symbolic Logic <sup>1</sup>	
PHIL 123	Ethics <sup>1</sup>	3
Select one of the following:		3
PHIL 331	Social and Political Philosophy <sup>1</sup>	
PHIL 335	Philosophy of Law and Justice <sup>1</sup>	
Select one of the following:		3
PHIL 341	Philosophy of Religion <sup>1</sup>	
PHIL 343	Asian Philosophy <sup>1</sup>	
PHIL 371	Ancient Western Philosophy <sup>1</sup>	3
PHIL 372	Modern Western Philosophy <sup>1</sup>	3
Select one of the following:		3
PHIL 375	Existentialism and Phenomenology <sup>1</sup>	
PHIL 362	Philosophy of Mind <sup>1</sup>	
Subtotal		21
<b>Philosophy Electives</b>		
Select four of the following courses, at least three credits at 300 level or above:		12
PHIL 101	Introduction to Philosophy <sup>1</sup>	
PHIL 140	World Religions <sup>1</sup>	
PHIL 163	Philosophy in Literature <sup>1</sup>	
PHIL 170	American Philosophy <sup>1</sup>	
PHIL 171	Philosophy of Human Existence <sup>1</sup>	
PHIL 261	Philosophy of Art <sup>1</sup>	
PHIL 324	Environmental Ethics <sup>1</sup>	
PHIL 325	Medical/Health Care Ethics <sup>1</sup>	
PHIL 326	Business Ethics <sup>1</sup>	
PHIL 331	Social and Political Philosophy <sup>1</sup>	
PHIL 335	Philosophy of Law and Justice <sup>1</sup>	
PHIL 336	Philosophy of Gender and Sex <sup>1</sup>	
PHIL 338	Ethics, Technology, and the Future <sup>1</sup>	
PHIL 341	Philosophy of Religion <sup>1</sup>	
PHIL 343	Asian Philosophy <sup>1</sup>	
PHIL 351	Philosophy of Natural Science <sup>1</sup>	
PHIL 362	Philosophy of Mind <sup>1</sup>	

PHIL 373	Modern Authors and Issues <sup>1</sup>	
PHIL 375	Existentialism and Phenomenology <sup>1</sup>	
PHIL 490	Independent Study <sup>1</sup>	
PHIL 498	Selected Topics (repeatable to six credits) <sup>1</sup>	
Subtotal		12
<b>Total Hours</b>		<b>33</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Presenting papers at conferences
5. Involvement in Ethics Bowl

PHILOSOPHY - BA (5 64)

This program is effective as of Fall 2020.

Revised 08.25.2020

UCC 03.24.2020

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
PHIL 101	Introduction to Philosophy	3
ENGL 102	Critical Writing	3
ESAP 101	FIRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Creative & Aesthetic Inquiry (p. 29)		3
Social Science Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
PHIL 123	Ethics	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3

SCI 101	Science of Life	3
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>

### Second Year

#### Fall

PHIL 113	Formal Logic	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
MODL 101	Modern Language Requirement	3
SCI 102	Understanding the Physical World	3
Free Elective		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>

#### Spring

PHIL 140	World Religions	3
Thematic Thread Requirement (p. 29)		3
MODL 102	Modern Language Requirement	3
Free Elective		3
Free Elective		3
<b>Hours</b>		<b>15</b>

### Third Year

#### Fall

PHIL 362	Philosophy of Mind	3
PHIL 341	Philosophy of Religion	3
MODL 103	Modern Language Requirement	3
Thematic Thread Requirement (p. 29)		3
Free Elective		3
<b>Hours</b>		<b>15</b>

#### Spring

PHIL 371	Ancient Western Philosophy	3
PHIL 331	Social and Political Philosophy	3
Thematic Thread Requirement (p. 29)		3
Free Elective		3
Free Elective		3
<b>Hours</b>		<b>15</b>

### Fourth Year

#### Fall

PHIL 372	Modern Western Philosophy	3
Thematic Thread Requirement (p. 29)		3
Philosophy Elective		3
Free Elective		3
Free Elective		3
<b>Hours</b>		<b>15</b>

#### Spring

PHIL 375	Existentialism and Phenomenology	3
PHIL 490	Independent Study	3
Free Elective		3
Free Elective		3

Free Elective	3
<b>Hours</b>	<b>15</b>
<b>Total Hours**</b>	<b>121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

*\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.*

Major Code: 5 64

Revised: 05.09.2022

## Philosophy, Bachelor of Arts (BA) - Concentration in Career-Related

This is a second major only

A 30 credit second major which allows students to design a program of philosophy courses to complement the student's preparations for a specific career.

### Program Learning Outcomes

- **Communication:** Students will express philosophical ideas in either oral or written format.
- **Degree Program Writing Competency:** Students will express philosophical ideas clearly and logically in written format.
- **Ethical Analysis:** Identify major ethical paradigms and analyze ethical issues with regard to them.
- **Problem Solving and Critical Thinking:** Break down complex ideas into their elements; perform reasoning tasks efficiently and correctly; clearly identify problems and solutions

### Related Links

Philosophy - Career Related, Major Program Page (<https://www.sru.edu/academics/majors-and-minors/philosophy-career-related/>)

Philosophy Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/philosophy/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

### Curriculum Guide

#### GPA Requirement

Major GPA: 2.0 or higher

Overall GPA: 2.0 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Modern Language Requirement	0-9
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	30
	Electives	48

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

#### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15

#### Thematic Thread

Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.



Code	Title	Hours
Complete 0-9 credits		0-9
<b>Total Hours</b>		<b>0-9</b>

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

Code	Title	Hours
<b>Core Requirements</b>		
Select one of the following:		3
PHIL 113	Formal Logic <sup>1</sup>	
PHIL 313	Symbolic Logic <sup>1</sup>	
PHIL 123	Ethics <sup>1</sup>	3
<b>Concentration Tracks</b>		
Select one of the following tracks:		6
<i>Business/Economics/Accounting Management/Marketing Tracks</i>		
PHIL 326	Business Ethics <sup>1</sup>	
PHIL 335	Philosophy of Law and Justice <sup>1</sup>	
<i>Communication Track</i>		
PHIL 170	American Philosophy <sup>1</sup>	
Select one of the following:		
PHIL 163	Philosophy in Literature <sup>1</sup>	
PHIL 261	Philosophy of Art <sup>1</sup>	
<i>Counseling Track</i>		
PHIL 325	Medical/Health Care Ethics <sup>1</sup>	
Select one of the following:		

PHIL 336	Philosophy of Gender and Sex <sup>1</sup>
PHIL 375	Existentialism and Phenomenology <sup>1</sup>
Education Track	
PHIL 170	American Philosophy <sup>1</sup>
PHIL 171	Philosophy of Human Existence <sup>1</sup>
Environmental Studies Track	
PHIL 324	Environmental Ethics <sup>1</sup>
PHIL 351	Philosophy of Natural Science <sup>1</sup>
Fine and Performing Arts Track	
PHIL 163	Philosophy in Literature <sup>1</sup>
PHIL 261	Philosophy of Art <sup>1</sup>
Journalism Track	
PHIL 170	American Philosophy <sup>1</sup>
PHIL 331	Social and Political Philosophy <sup>1</sup>
Law Track	
PHIL 335	Philosophy of Law and Justice <sup>1</sup>
Select one of the following:	
PHIL 331	Social and Political Philosophy <sup>1</sup>
PHIL 170	American Philosophy <sup>1</sup>
Life Sciences Track	
PHIL 324	Environmental Ethics <sup>1</sup>
PHIL 351	Philosophy of Natural Science <sup>1</sup>
Literature Track	
PHIL 163	Philosophy in Literature <sup>1</sup>
PHIL 375	Existentialism and Phenomenology <sup>1</sup>
Medical and Health Care Track	
PHIL 325	Medical/Health Care Ethics <sup>1</sup>
PHIL 351	Philosophy of Natural Science <sup>1</sup>
Ministry Track	
PHIL 341	Philosophy of Religion <sup>1</sup>
Select one of the following:	
PHIL 140	World Religions <sup>1</sup>
PHIL 343	Asian Philosophy <sup>1</sup>
Politics, Sociology/Anthropology Track	
PHIL 331	Social and Political Philosophy <sup>1</sup>
Select one of the following:	
PHIL 335	Philosophy of Law and Justice <sup>1</sup>
PHIL 336	Philosophy of Gender and Sex <sup>1</sup>
Psychology Track	
PHIL 362	Philosophy of Mind <sup>1</sup>
PHIL 375	Existentialism and Phenomenology <sup>1</sup>
Recreation Track	
PHIL 324	Environmental Ethics <sup>1</sup>
PHIL 331	Social and Political Philosophy <sup>1</sup>
Social Welfare Track	
PHIL 331	Social and Political Philosophy <sup>1</sup>
PHIL 375	Existentialism and Phenomenology <sup>1</sup>
Technology Track	
PHIL 338	Ethics, Technology, and the Future <sup>1</sup>
PHIL 375	Existentialism and Phenomenology <sup>1</sup>
Subtotal	12
Required Electives	

Select at least 12 credits from any other philosophy courses	12
Select 6 credits from either philosophy courses or courses in an area related in the field of specialization	6
Subtotal	18
<b>Total Hours</b>	<b>30</b>

- <sup>1</sup> Course counts for 50% of Major requirements and Major GPA
- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs (short-term, semester, and year-long)
2. High-Impact Practice (HIP) designated classes
3. Student-faculty research
4. Presenting papers at conferences
5. Involvement in Ethics Bowl

PHILOSOPHY - BA (5 64)

Concentration in Career Related (CREL)

This program is effective as of Fall 2020.

Revised 12-2019

UCC 12.3.2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

## Philosophy, Minor

Philosophy encourages you to critically examine what passes as "common knowledge," formulate well-reasoned positions on important issues, and express your ideas clearly and carefully. The Philosophy program at SRU fosters excellence in reading, writing, critical thinking, and ethical deliberation. SRU philosophy students have won more top awards at the annual statewide Association for Philosophy and Religious Studies (IAPRS) than any other university within the PA State System of Higher Education.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Philosophy, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/philosophy/>)

Philosophy Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/philosophy/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Required Courses</b>		
Select six of the following:		18
PHIL 101	Introduction to Philosophy	
PHIL 113	Formal Logic	
PHIL 123	Ethics	
PHIL 140	World Religions	
PHIL 163	Philosophy in Literature	
PHIL 170	American Philosophy	
PHIL 171	Philosophy of Human Existence	
PHIL 261	Philosophy of Art	
PHIL 313	Symbolic Logic	
PHIL 324	Environmental Ethics	
PHIL 325	Medical/Health Care Ethics	
PHIL 326	Business Ethics	
PHIL 331	Social and Political Philosophy	
PHIL 335	Philosophy of Law and Justice	
PHIL 336	Philosophy of Gender and Sex	
PHIL 338	Ethics, Technology, and the Future	
PHIL 341	Philosophy of Religion	
PHIL 343	Asian Philosophy	
PHIL 351	Philosophy of Natural Science	
PHIL 362	Philosophy of Mind	
PHIL 371	Ancient Western Philosophy	
PHIL 372	Modern Western Philosophy	
PHIL 373	Modern Authors and Issues	
PHIL 375	Existentialism and Phenomenology	
PHIL 376	Analytic Philosophy	
PHIL 490	Independent Study (one or more supervised papers on an important philosophical theme)	
PHIL XXX	PHIL Course <sup>1</sup>	
<b>Total Hours</b>		<b>18</b>

- <sup>1</sup> Students may select from Experimental courses PHIL 190, PHIL 290, PHIL 390; Workshops PHIL 195, PHIL 295, PHIL 395, PHIL 495; Selected topics PHIL 198, PHIL 298, PHIL 398, PHIL 498.

- \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN PHILOSOPHY (60A)

This program is effective as of Fall 2020.

Revised 07.10.20

UCC 03.24.20

## Political Science

Chair	Secretary	Location	Department Phone
Dr. Heather Rice	Renee Hazlet	203 Spotts World Culture Building	724-738-2075

Department Web Site URL (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/political-science/>)

Department Fact Sheet URL (<https://www.sru.edu/documents/programs/factsheets/undergraduate/polisci-fs.pdf>)

## Faculty

### Heather Frederick

Professor  
Political Science  
Ph.D., West Virginia University  
M.A., West Virginia University  
B.A., Hollins College

### Cheryl Kerchis

Assistant Professor  
Political Science  
M.P.A., University of Pittsburgh  
B.S., Georgetown University

### David Kershaw

Associate Professor  
Political Science  
Ph.D., University of North Carolina  
M.A., Illinois State University  
B.S., West Virginia University  
B.A., West Virginia University

### Heather Rice

Associate Professor  
Political Science  
Ph.D., University of Pittsburgh  
M.A., University of Pittsburgh  
B.S., Clemson University

### Nicholas Spina

Assistant Professor  
Political Science  
Ph.D., University of Missouri  
B.A., Michigan State University

## Programs

### Majors

- Political Science, Bachelor of Arts (BA) - Concentration in General Political Science (p. 1066)
- Political Science, Bachelor of Arts (BA) - Concentration in International Politics (p. 1068)
- Political Science, Bachelor of Arts (BA) - Concentration in Law and Politics (p. 1071)
- Political Science, Bachelor of Arts (BA) - Concentration in Professional Politics (p. 1073)
- Political Science, Bachelor of Arts (BA) - Concentration in Public Policy (p. 1076)

### Minors

- American Politics, Minor (p. 1064)
- Comparative Politics/International Relations, Minor (p. 1064)
- International Affairs, Minor (p. 1065)
- Political Science, Minor (p. 1078)

## Courses

### POLS 101 - American National Government

A survey of American national politics, emphasis on the constitution, parties, interest groups, elections, organization and structure of government.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

### POLS 103 - International Relations

An overview of the politics of various governments; the nature of relations among nations; a study of problems such as terrorism and multinationals as political participants.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Citizenship & Social Problems, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

**POLS 110 - Foundations of Political Science**

This course introduces students to contemporary political problems and how political scientists think about those problems. Students will learn the language of political science including the big themes, concepts, and models that span centuries of political science literature and provide insight into global and domestic political conflict. Students will use the lens of political science to explore concepts such as liberty, equality, justice, rights, individual autonomy, democracy and representation, identity and tolerance, the appropriate role and limits of government, and sovereignty of states in the international system. Although non-democratic forms of governance will be examined, this course will focus on democratic governance - why we chose it, what political practices and reforms can improve it, and how citizens through engagement and dialogue can help to strengthen it. This course will emphasize the relevance of the core concepts of political science in relation to important contested political issues in the US and the global community today.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course

**POLS 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**POLS 170 - Investigating Politics**

This course guides students through the methods of social science inquiry by exploring major problems facing modern societies on the local, national, and/or global levels. Students will use the scientific process to learn how we know and what we know about the social world. Students will learn basic research concepts, explore the use of theories and models to guide research, and develop and use social science to become knowledgeable citizens and critical consumers of political news and information. Students will also learn how social science differs from natural science in its attention to normative and ethical questions and the role of power dynamics in shaping social, economic and political outcomes.

Credits: 3

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**POLS 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**POLS 195 - Workshop**

Special topics of interest to undergraduates and selected members of the community. A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**POLS 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**POLS 200 - State and Local Government**

Examines state levels of government. Emphasis is on constitutions, parties and interest groups, elections, organization and structure of government.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

**POLS 215 - Introduction to Political Theory**

An introduction to classical and modern theories of politics, governments and ideologies.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Thematic Thread(s): Citizenship & Social Problems, Institutions & Human Innovations, Transfer Thread Completion Course

**POLS 220 - Foreign Policy**

The study of selected instruments of foreign policy, how it is formulated and implemented; the focus is on the U.S.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course, United States in Global Context

**POLS 223 - Law and Courts**

An introductory examination of the structure of the judicial branch of government; what we mean when we talk about the "law"; how our understanding of what is law has developed and changed throughout our history; how our state and federal courts are administered and structured; the nature of legal education; the work of the Supreme Court, judges, and lawyers; how the criminal justice system chooses juries, tries defendants, negotiates justice through plea bargaining, and depends on its judiciary; and the role of the legal system in resolving private disputes.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Thematic Thread(s): Citizenship & Social Problems, Institutions & Human Innovations, Transfer Thread Completion Course

**POLS 235 - Civil Discourse and Democracy**

This course is an introduction to civil discourse, or the practice of constructive dialogues and deliberation, based in mutual respect, which ultimately seeks to advance the public interest. Students will use the lens of political science to explore contemporary political problems and how to approach, discuss, and analyze them.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**POLS 255 - Introduction to Public Policy**

This course introduces students to the idea that private actions create problems for communities that citizens and community leaders must work together to solve. Students learn a universal framework for overcoming community problems as well as the skills needed to recognize the moral and democratic dilemmas inherent in these problems. Students hone their knowledge by gathering evidence, researching, and addressing real community issues.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course

**POLS 263 - Introduction to Comparative Politics**

The stress is on descriptions and conceptions of the state and political institutions in the non-Western and Western worlds; with attention on policy-making, national issues, and systems.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Thematic Thread(s): Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

**POLS 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**POLS 295 - Workshop**

Special topics of interest to undergraduates and selected members of the community. A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**POLS 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**POLS 301 - Organized Political Action**

Political parties and interest groups provide crucial linkages between citizens and their government. This course will investigate the nature and origins of organized political groups in American politics, seeking to understand what it takes for political parties and interest groups, which are informal players of American politics, to survive, thrive, and develop a powerful voice in the national political dialogue. While the course focuses on American parties and interest groups, they will be explored in the global and comparative context.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 303 - Seminar in Democracy**

In response to waning public trust in American public institutions and democracy, it is imperative to understand how political systems fail. In this course, students will define democracy, discuss what happens when democracies break down, identify the causes of the breakdown, and find solutions to these problems. Students will also identify those characteristics and behaviors democracy requires of citizens for the system to work well.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course, United States in Global Context

**POLS 306 - Campaigns & Elections**

Elections are the cornerstone of democracy. Without free, fair and frequent elections, there is no popular governance. The United States holds more elections for more public offices and governments than any other nation in the world. The purpose of this course is to examine the key issues, questions, and controversies surrounding campaigns and elections in the United States and compare to campaigns and elections held in other democracies around the world.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 310 - Research Methods**

An examination of the foundations of systematic research, techniques of data collection and methods of data analysis.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 321 - The Presidency**

The study and evaluation of executive leadership in modern governments; the roles, functions and types of presidential leaders.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**POLS 322 - The United Nations and International Law**

An examination of the development, structure, and operations of the United Nations system and the fundamentals of public international law.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread

Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 325 - The Congress**

The study of legislative structures, functions and organizations; focus on legislative elections, committees, and decision-making.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 327 - Public Opinion and Political Attitudes**

An examination of the nature, origins, and structures of political attitudes.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 328 - Assessing Public Opinion**

Many careers rely on individuals who have the capacity to create and implement public opinion surveys, and analyze the results of public opinion polls. Urban planning, public administration, and public policy professionals use surveys for program evaluation and democratic accountability, while lobbyists, nonprofit, campaign, and corporate government relations professionals use surveys for assessing public problems and the political environment. Students will gain experience building and fielding surveys that accurately assess public opinion, often while helping community stakeholders with real-world needs.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 329 - Political Learning**

The course examines the process by which the transmission of political values, attitudes, perceptions and behaviors are undertaken in different political systems.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 333 - The Political Film**

The Political Film will be presented as an expression of social concerns in our society. Individual films will be evaluated as vehicles, which can influence people by disseminating ideas, convey points of view and comment on matters of political controversy.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 349 - Utopian Experiments: Issues of Gender and Power**

This course will examine the various alternative plans for the intentional restructuring of society as exhibited in the works of utopian theorists.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 350 - Transnational Terrorism**

An examination of politics and practice of transnational terrorism, as well as alternative policy responses to transnational terrorism. Topics will include an overview of the history and theory of terrorism as a political tactic, the issues motivating its use by contemporary terrorist organizations, the structure and tactics of terrorist networks, and the connections between states, terrorist networks, and transnational organized crime.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 351 - Politics of Race**

This course is an exploration of the politics and policy issues that disproportionately affect racial and ethnic minorities in the United States. A key objective of this course is to help students understand how the past racial history of the US shapes political and policy outcomes in the US today across a range of issues including income and wealth, employment, education, health, housing, and criminal justice. Students in this course will think and write critically about how the US got to this point and how we can get out of this pattern of persistent racial disparities. Students will be challenged throughout the course to apply concepts of racial justice.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 354 - Seminar in Religion and Politics**

This course is intended to help students understand the variety of religious voices in American politics and to acquaint students with the significance and variability of religious influence on contemporary American political life, i.e. public policy and individual political choices. The term "religion" is defined broadly to include formal theological creeds as well as the social beliefs, organizations, and subcultures associated with various religious communities. The central goal of this course is to understand how religion affects politics (and vice versa). Specifically, the course will explore the effects of the diverse religious traditions in America on American political history, voting, lobbying, political mobilization, political culture, and international engagement. A sampling of questions to be addressed follows: What has been the relative impact of various religions on American politics? How do religious actors translate their values into action? In what ways is the impact of religion direct? Indirect? How does the nature of the environment (domestic and international) affect the ability of religious actors to wield influence?

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Thematic Thread(s): Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 356 - Gay and Lesbian Politics**

This course will seek to understand how and why the battle over gay rights has come to occupy such a prominent place in our society and what this battle tells us about politics more generally. Although the course is centered on the politics of gay rights in the American context, we will also compare the American experience to those of other nations.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Thematic Thread(s): Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 357 - Civil Liberties and Civil Rights**

A survey of current controversies regarding the rights and freedoms guaranteed to American citizens by the U.S. Constitution.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 359 - Policy Analysis and Evaluation**

An examination of the ethical, theoretical and practical issues associated with the application of analytic and evaluative techniques to selected public policy problems and programs.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 364 - Using Evidence to Solve Public Problems**

Public decision makers increasingly call for evidence-based solutions to public problems. In this course, students will learn to assess and use data and evidence to help solve community problems. These skills provide the foundation of government relations, public service, nonprofit, and other careers relying on data-driven decision-making.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Thematic Thread(s): Citizenship & Social Problems, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 365 - International Political Economy**

The in-depth analysis of the political relationships among nation-states.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 367 - National and International Security: Problems and Issues**

National security problems combine aspects of American government, international relations, game theory, and logistical problems derived from research development priorities, economics. The course introduces the major issues of our time such as arms control, disarmament, the nature of war, the reality of decision-making and various case studies.

Credits: 3

Thematic Thread(s): Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 369 - Politics of Developing Areas**

A developmental approach to the comparative study of the primary functions, structures and capabilities of various industrializing political systems such as India, China, Mexico, Brazil, Tanzania.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Thematic Thread(s): Conservation, Technology & Imagination, Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 370 - Latin American Politics and Development**

This is an interdisciplinary course designed to give students a broad understanding of the historical, contemporary social (including gender, race, ethnicity, religion, etc.), economic, and in particular, political forces that shape Latin America. A number of different perspectives will be utilized to understand and explain the current state of Latin American political and economic development.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 372 - Campaign Management & Strategy**

This course will provide a very practical, hands-on blueprint for students who wish to run effectively and successfully for public office, or for students who hope to be effective and successful campaign managers or staffers. This course will consider campaigning from the perspective of both the candidate and the campaign manager, with a focus on developing and implementing a comprehensive campaign strategy.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 375 - Women and Politics**

The course will examine the effect of socialization and the impact of culture on women, gender differences in patterns of political participation; legal, political and social rights of women; and the effects of the political system upon the lives of women and their families.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Thematic Thread(s): Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 385 - War and Political Violence**

This course surveys the multidisciplinary factors that give rise to acts of political violence, including inter-state war, civil war, genocide, and terrorism. Students will study theoretical perspectives, real-world examples, and a broad range of methodologies used to understand, evaluate, and respond to contemporary conflicts. There are no prerequisites.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 395 - workshop**

Special topics of interest to undergraduates and selected members of the community. A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 403 - Constitutional Law**

The case study and analysis of the development and growth of constitutions through judicial interpretation.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 444 - Capstone: Political Analysis**

An examination of the theoretical and practical issues associated with the application of analytic and evaluative techniques to selected political institutions, behaviors, or policies. Students will be assessed on their accomplishment of outcomes expected of Political Science graduates.

Prerequisite: POLS 310<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 450 - Internship**

Varies

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 451 - Harrisburg Internship**

Assignment as an intern with a governmental agency in the state capital in Harrisburg, Pa. Open to all students at Slippery Rock University.

Credits: 1-9

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 452 - Harrisburg Internship Project**

A research project developed by the intern and approved by the Harrisburg internship coordinator on some aspect of government activities or public policy.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 454 - Harrisburg Internship Seminar**

Weekly seminar composed of all interns in the program and taught by the Harrisburg internship coordinator. Speakers from state government will address the seminar and the seminar will participate in several exercises designed to increase skills in governmental processes.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 490 - Independent Study**

In-depth reading and research in an area of particular interest to the student, with the guidance of a faculty member. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 495 - Workshop**

Special topics of interest to undergraduates and selected members of the community. A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## American Politics, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

### Related Links

American Politics, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/american-politics-minor/>)

Political Science Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/political-science/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

### Curriculum Guide

#### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits

Code	Title	Hours
<b>Required Courses</b>		
Select six courses from the following – three courses must be 300 level or higher:		18
POLS 101	American National Government	
POLS 200	State and Local Government	
POLS 223	Law and Courts	
POLS 321	The Presidency	
POLS 325	The Congress	
POLS 327	Public Opinion and Political Attitudes	
POLS 354	Seminar in Religion and Politics	
POLS 375	Women and Politics	
POLS 403	Constitutional Law	
<b>Total Hours</b>		<b>18</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Minor in American Politics (68A)

This program is effective as of Fall 2019

Revised 10-2019

UCC 9.10.2019

## Comparative Politics/International Relations, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

### Related Links

Comparative Politics and International Relations, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/comparative-politics-and-international-relations-minor/>)

Political Science Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/political-science/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Comparative Politics Courses</b>		
POLS 263	Introduction to Comparative Politics	3
POLS 369	Politics of Developing Areas	3
Additional courses to be determined by the department.		3
<b>International Relations and Politics Courses</b>		
Select three of the following:		9
POLS 103	International Relations	
POLS 220	Foreign Policy	
POLS 322	The United Nations and International Law	
POLS 365	International Political Economy	
POLS 367	National and International Security: Problems and Issues	
<b>Total Hours</b>		<b>18</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Minor in Comparative Politics and International Relations (68B)

This program is effective as of Fall 2018

Revised 6-2019

## International Affairs, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

### Related Links

International Affairs, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/international-affairs-minor/>)

Political Science Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/political-science/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits

Code	Title	Hours
<b>Required Courses</b>		
Select two of the following courses:		6
ECON 105	Economics of Social Issues	
GES 105	World Regional Geography	
POLS 103	International Relations	
Select three of the following courses with six credits at 300 level or higher:		9
COMM 217	Intercultural Communication	
ECON 326	International Economics	
ENGL 402	World Literature	
ENVS 440	Science, Technology and the Environment	
FIN 427	International Financial Management	
FIN 430	International Banking	
GES 242	Geography of Religion	
GES 205	Cultural Geography	
GES 315	Cartography I	
GES 331	Economic Geography	
GES 415	Cartography II	
HLTH 311	International Health	
POLS 220	Foreign Policy	
POLS 263	Introduction to Comparative Politics	
POLS 322	The United Nations and International Law	
POLS 365	International Political Economy	
POLS 367	National and International Security: Problems and Issues	
<b>Study of the Culture, History or Politics of a Foreign Country or World Region</b>		
Select at least one course:		3
CHIN 306	Survey of Chinese Civilization and Culture	
ENGL 316	Asian Film	
FREN 306	France and Francophone Identities Today	
GERM 305	German Civilization	
GERM 306	Modern German Civilization	
GES 303	Asia	
GES 308	Europe	
GES 309	Africa	
HIST 306	Russia Since 1855	



HIST 332	Britain Since 1689	
HIST 352	Latin America Since 1830	
HIST 362	Africa North of the Zambezi	
HIST 363	Southern Africa	
HIST 381	East Asian Military Traditions	
HIST 382	Modern Asian Pacific Rim	
HIST 386	Modern China	
HIST 427	Nineteenth Century Europe	
HIST 462	The Contemporary Middle East	
KORN 306	Modern Korean Civilization	
RUSS 306	The Challenge of Russian Legacy	
SPAN 305	Spain Today	
SPAN 335	Women in Hispanic Literature	
SPAN 431	Exploring Spanish Culture through Media	
SPAN 432	Exploring Latin American Cultures through Media	
<b>Total Hours</b>		<b>18</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

#### Demonstration of Modern Language Competency at the 103 level

- Chinese
- French
- German
- Korean
- Spanish
- Russian
- Japanese
- Italian

#### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Minor in International Affairs (68E)

This program is effective as of Fall 2018

Revised 06.29.2022

## Political Science, Bachelor of Arts (BA) - Concentration in General Political Science

### PROGRAM LEARNING OUTCOMES

- Substantive Knowledge: Political Science students will demonstrate substantive knowledge of institutions, processes and values that

shape politics within and among states, and the major theories, concepts, foundations, and methodologies used in the study of politics. (UG 9)

- Critical Thinking: Political Science students will develop the capacity to think critically about local, state, national, and global politics. (UG 2)
- Effective Communication: Political Science students will be able to present and defend their ideas, the information that they have acquired, and the analyses developed while utilizing scholarly approaches in political science. (UG 1)
- Research Skills: Political Science students will demonstrate competency with basic tools underlying modern social and political science research, including proficiency in both quantitative and qualitative analysis, which will allow students to ask and answer basic political questions. (UG 3, UG 4)
- Engagement in Politics: Political Science students will be prepared for active citizenship and demonstrate an ongoing interest in local, state, national and global politics. (UG 7)

### RELATED LINKS

Political Science, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/political-science/>)

Political Science Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/political-science/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

### CURRICULUM GUIDE

#### GPA REQUIREMENT

Major GPA: 2.00 or higher

Overall GPA: 2.00 or higher

#### SUMMARY\*

Code	Title	Hours
Rock Studies 2 Requirements		42
Modern Language Requirement		0-9
Other Basic Requirements		0-3
Computer Competency		0-3
Major Requirements		39
Electives		39

#### ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

#### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
Complete 0-9 credits		0-9
<b>Total Hours</b>		<b>0-9</b>

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## MAJOR REQUIREMENTS

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Major Requirements</b>		
<i>Politic Science Core Coursework</i>		
POLS 101	American National Government <sup>1</sup>	3
POLS 103	International Relations <sup>1</sup>	3
POLS 255	Introduction to Public Policy <sup>1</sup>	3
POLS 263	Introduction to Comparative Politics <sup>1</sup>	3
POLS 310	Research Methods <sup>1</sup>	3
POLS 444	Capstone: Political Analysis <sup>1</sup>	3
<i>General Concentration Required Coursework</i>		
Required Course		3
POLS 215	Introduction to Political Theory <sup>1</sup>	
Select 6 credits in International Relations and Comparative Politics		6
POLS 367	National and International Security: Problems and Issues <sup>1</sup>	
POLS 369	Politics of Developing Areas <sup>1</sup>	
Select 3 credits in American Political Institutions		3
POLS 200	State and Local Government <sup>1</sup>	
POLS 223	Law and Courts <sup>1</sup>	
POLS 321	The Presidency <sup>1</sup>	
POLS 325	The Congress <sup>1</sup>	
Select nine credits in electives		9
POLS 301	Organized Political Action <sup>1</sup>	
POLS 303	Seminar in Democracy <sup>1</sup>	
POLS 322	The United Nations and International Law <sup>1</sup>	
POLS 328	Assessing Public Opinion <sup>1</sup>	
POLS 333	The Political Film <sup>1</sup>	
POLS 351	Politics of Race <sup>1</sup>	
POLS 354	Seminar in Religion and Politics <sup>1</sup>	
POLS 356	Gay and Lesbian Politics <sup>1</sup>	
POLS 357	Civil Liberties and Civil Rights <sup>1</sup>	
POLS 359	Policy Analysis and Evaluation <sup>1</sup>	
POLS 372	Campaign Management & Strategy <sup>1</sup>	
POLS 385	War and Political Violence	
POLS 403	Constitutional Law <sup>1</sup>	
POLS 450	Internship <sup>1</sup>	
<b>Total Hours</b>		<b>39</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Political Science BA (5 68) with General Concentration (GEPS)

This program is effective as of Summer 2021

Revised 12.20.2022

UCC 10.25.2022/11.29.2022

## RECOMMENDED FOUR-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
POLS 101	American National Government	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
MODL 1XX	Language and Culture I, II, or III	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
POLS 103	International Relations	3
POLS 110	Foundations of Political Science	3
MODL 1XX	Language and Culture I, II, or III	3
ENGL 104	Critical Reading	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
POLS 255	Introduction to Public Policy	3
POLS 263	Introduction to Comparative Politics	3
MODL 1XX	Language and Culture I, II, or III	3
Social Science Inquiry (p. 29)		3
Creative & Aesthetic Inquiry (p. 29)		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
POLS 310	Research Methods	3
POLS 2XX	Concentration Requirement	3
MATH 117	Quantitative Reasoning	3
Thematic Thread Requirement (p. 29)		3
Elective/Minor/Certificate/Second Major		3
<b>Hours</b>		<b>15</b>

### Third Year

#### Fall

POLS 3XX/4XX	Concentration Requirement	6
SCI 101	Science of Life	3
Elective/Minor/Certificate/Second Major		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>

#### Spring

POLS 3XX/4XX	Concentration Requirement	6
Thematic Thread Requirement (p. 29)		3
SCI 102	Understanding the Physical World	3
Elective/Minor/Certificate/Second Major		3
<b>Hours</b>		<b>15</b>

### Fourth Year

#### Fall

POLS 444	Capstone: Political Analysis	3
POLS 3XX/4XX	Concentration Requirement	3
Thematic Thread Requirement (p. 29)		3
Free/Minor/Certificate/Second Major		6
<b>Hours</b>		<b>15</b>

#### Spring

Free/Minor/Certificate/Second Major		12
POLS	Concentration Elective	3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 5 68

Concentration Code: GEPS

Revised: 10.18.2021

## Political Science, Bachelor of Arts (BA) - Concentration in International Politics

## PROGRAM LEARNING OUTCOMES

- Substantive Knowledge: Political Science students will demonstrate substantive knowledge of institutions, processes and values that shape politics within and among states, and the major theories, concepts, foundations, and methodologies used in the study of politics. (UG 9)

- **Critical Thinking:** Political Science students will develop the capacity to think critically about local, state, national, and global politics. (UG 2)
- **Effective Communication:** Political Science students will be able to present and defend their ideas, the information that they have acquired, and the analyses developed while utilizing scholarly approaches in political science. (UG 1)
- **Research Skills:** Political Science students will demonstrate competency with basic tools underlying modern social and political science research, including proficiency in both quantitative and qualitative analysis, which will allow students to ask and answer basic political questions. (UG 3, UG 4)
- **Engagement in Politics:** Political Science students will be prepared for active citizenship and demonstrate an ongoing interest in local, state, national and global politics. (UG 7)

## RELATED LINKS

Political Science, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/political-science/>)

Political Science Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/political-science/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Major GPA: 2.00 or higher

Overall GPA: 2.00 or higher

### SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Modern Language Requirement	0-9
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	39
	Electives	39

### ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

#### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		

Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
Complete 0-9 credits		0-9
<b>Total Hours</b>		<b>0-9</b>

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this

requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## MAJOR REQUIREMENTS

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Major Requirements</b>		
<i>Political Science Core Coursework</i>		
POLS 101	American National Government <sup>1</sup>	3
POLS 103	International Relations <sup>1</sup>	3
POLS 255	Introduction to Public Policy <sup>1</sup>	3
POLS 263	Introduction to Comparative Politics <sup>1</sup>	3
POLS 310	Research Methods <sup>1</sup>	3
POLS 444	Capstone: Political Analysis <sup>1</sup>	3
<i>International Politics Concentration Required Coursework</i>		18
Select 15 credits in International Relations and Comparative Politics		15
POLS 322	The United Nations and International Law <sup>1</sup>	
POLS 365	International Political Economy <sup>1</sup>	
POLS 367	National and International Security: Problems and Issues <sup>1</sup>	
POLS 369	Politics of Developing Areas <sup>1</sup>	
POLS 385	War and Political Violence	
Select 6 credits in International Politics-Related Electives		6
POLS 215	Introduction to Political Theory	
POLS 303	Seminar in Democracy <sup>1</sup>	
POLS 450	Internship <sup>1</sup>	
COMM 217	Intercultural Communication <sup>1</sup>	
COMM 405	Global Media <sup>1</sup>	
CRIM 328	Transnational Crime & Justice <sup>1</sup>	
GES 303	Asia <sup>1</sup>	
GES 307	Australia <sup>1</sup>	
GES 331	Economic Geography <sup>1</sup>	
GES 344	Environmental Justice <sup>1</sup>	
GES 361	Gender and the Environment <sup>1</sup>	
GES 444	World Environmental Cultures <sup>1</sup>	
HIST 406	Mass Killing and Genocide in the Modern World <sup>1</sup>	
HIST 462	The Contemporary Middle East <sup>1</sup>	
HIST 463	Israel-History, State and Society <sup>1</sup>	
MRKT 303	Issues in Global Business <sup>1</sup>	
<b>Total Hours</b>		<b>39</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum

categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Political Science BA (5 68) with Concentration in International Politics (INPL)

This program is effective as of Summer 2022

Revised 12.20.2022

UCC 10.25.2022/11.29.2022

## RECOMMENDED FOUR-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
POLS 101	American National Government	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
MODL 1XX	Language and Culture I, II, or III	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
POLS 103	International Relations	3
POLS 110	Foundations of Political Science	3
MODL 1XX	Language and Culture I, II, or III	3
ENGL 104	Critical Reading	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
POLS 255	Introduction to Public Policy	3
POLS 263	Introduction to Comparative Politics	3
MODL 1XX	Language and Culture I, II, or III	3
Social Science Inquiry (p. 29)		3
Creative & Aesthetic Inquiry (p. 29)		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
POLS 310	Research Methods	3
POLS 2XX	Concentration Requirement	3
MATH 117	Quantitative Reasoning	3
Thematic Thread Requirement (p. 29)		3
Elective/Minor/Certificate/Second Major		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
POLS 3XX/4XX	Concentration Requirement	6



SCI 101	Science of Life	3
Elective/Minor/Certificate/Second Major		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
POLS 3XX/4XX	Concentration Requirement	6
Thematic Thread Requirement (p. 29)		3
SCI 102	Understanding the Physical World	3
Elective/Minor/Certificate/Second Major		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
POLS 444	Capstone: Political Analysis	3
POLS 3XX/4XX	Concentration Requirement	3
Thematic Thread Requirement (p. 29)		3
Free/Minor/Certificate/Second Major		6
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Free/Minor/Certificate/Second Major		12
POLS	Concentration Elective	3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 5 68

Concentration Code: INPL

Revised: 10.18.2021

## Political Science, Bachelor of Arts (BA) - Concentration in Law and Politics

### PROGRAM LEARNING OUTCOMES

- Substantive Knowledge: Political Science students will demonstrate substantive knowledge of institutions, processes and values that shape politics within and among states, and the major theories, concepts, foundations, and methodologies used in the study of politics. (UG 9)
- Critical Thinking: Political Science students will develop the capacity to think critically about local, state, national, and global politics. (UG 2)
- Effective Communication: Political Science students will be able to present and defend their ideas, the information that they have

acquired, and the analyses developed while utilizing scholarly approaches in political science. (UG 1)

- Research Skills: Political Science students will demonstrate competency with basic tools underlying modern social and political science research, including proficiency in both quantitative and qualitative analysis, which will allow students to ask and answer basic political questions. (UG 3, UG 4)
- Engagement in Politics: Political Science students will be prepared for active citizenship and demonstrate an ongoing interest in local, state, national and global politics. (UG 7)

### RELATED LINKS

Political Science, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/political-science/>)

Political Science Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/political-science/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

### CURRICULUM GUIDE

#### GPA REQUIREMENT

Major GPA: 2.00 or higher

Overall GPA: 2.00 or higher

#### SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Modern Language Requirement	0-9
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	39
	Electives	39

#### ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

#### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		

SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
Complete 0-9 credits		0-9
<b>Total Hours</b>		<b>0-9</b>

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## MAJOR REQUIREMENTS

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Major Requirements</b>		
<i>Political Science Core Coursework</i>		
POLS 101	American National Government <sup>1</sup>	3
POLS 103	International Relations <sup>1</sup>	3
POLS 255	Introduction to Public Policy <sup>1</sup>	3
POLS 263	Introduction to Comparative Politics <sup>1</sup>	3
POLS 310	Research Methods <sup>1</sup>	3
POLS 444	Capstone: Political Analysis <sup>1</sup>	3
<i>Law and Politics Concentration Required Coursework</i>		
Required Courses		
POLS 215	Introduction to Political Theory	3
POLS 223	Law and Courts <sup>1</sup>	3
POLS 357	Civil Liberties and Civil Rights	3
POLS 403	Constitutional Law	3
Select 6 credits in Politic Science Electives		6
POLS 200	State and Local Government <sup>1</sup>	
POLS 303	Seminar in Democracy <sup>1</sup>	
POLS 321	The Presidency <sup>1</sup>	
POLS 325	The Congress <sup>1</sup>	
POLS 351	Politics of Race <sup>1</sup>	
POLS 359	Policy Analysis and Evaluation <sup>1</sup>	
POLS 450	Internship	
Select 3 credits in Electives		3
COMM 410	Communication Law <sup>1</sup>	
CRIM 110	Introduction to Criminology & Criminal Justice Systems <sup>1</sup>	
CRIM 263	Introduction to Criminal Procedure <sup>1</sup>	
CRIM 422	The Death Penalty <sup>1</sup>	
CSS 352	Law & Ethics in the Workplace <sup>1</sup>	
ENGL 312	Introduction to Shakespeare <sup>1</sup>	
GES 324	Environmental Law and Policy <sup>1</sup>	
HIST 326	The Long Civil Rights Movement <sup>1</sup>	
HIST 423	Ancient Rome <sup>1</sup>	
HIST 453	American Constitutional History and Law <sup>1</sup>	
HSS 441	Terrorism, Law and National Security <sup>1</sup>	
PHIL 113	Formal Logic <sup>1</sup>	
PHIL 123	Ethics <sup>1</sup>	
PHIL 331	Social and Political Philosophy <sup>1</sup>	
PHIL 335	Philosophy of Law and Justice <sup>1</sup>	
SPMT 486	Sport Law and Facilities <sup>1</sup>	
<b>Total Hours</b>		<b>39</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Political Science BA (5 68) with Concentration in Law and Politics (LAPL)

This program is effective as of Summer 2021

Revised 12.20.2022

UCC 10.25.22/11.29.22

## RECOMMENDED FOUR-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
POLS 101	American National Government	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
MODL 1XX	Language and Culture I, II, or III	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
POLS 103	International Relations	3
POLS 110	Foundations of Political Science	3
MODL 1XX	Language and Culture I, II, or III	3
ENGL 104	Critical Reading	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
POLS 255	Introduction to Public Policy	3
POLS 263	Introduction to Comparative Politics	3
MODL 1XX	Language and Culture I, II, or III	3
Social Science Inquiry (p. 29)		3
Creative & Aesthetic Inquiry (p. 29)		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
POLS 310	Research Methods	3
POLS 2XX	Concentration Requirement	3
MATH 117	Quantitative Reasoning	3
Thematic Thread Requirement (p. 29)		3
Elective/Minor/Certificate/Second Major		3
<b>Hours</b>		<b>15</b>

### Third Year

#### Fall

POLS 3XX/4XX	Concentration Requirement	6
SCI 101	Science of Life	3
Elective/Minor/Certificate/Second Major		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>

#### Spring

POLS 3XX/4XX	Concentration Requirement	6
Thematic Thread Requirement (p. 29)		3
SCI 102	Understanding the Physical World	3
Elective/Minor/Certificate/Second Major		3
<b>Hours</b>		<b>15</b>

### Fourth Year

#### Fall

POLS 444	Capstone: Political Analysis	3
POLS 3XX/4XX	Concentration Requirement	3
Thematic Thread Requirement (p. 29)		3
Free/Minor/Certificate/Second Major		6
<b>Hours</b>		<b>15</b>

#### Spring

Free/Minor/Certificate/Second Major		12
POLS	Concentration Elective	3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 5 68

Concentration Code: LAPL

Revised: 10.18.2021

## Political Science, Bachelor of Arts (BA) - Concentration in Professional Politics

## PROGRAM LEARNING OUTCOMES

- Substantive Knowledge: Political Science students will demonstrate substantive knowledge of institutions, processes and values that shape politics within and among states, and the major theories, concepts, foundations, and methodologies used in the study of politics. (UG 9)

- **Critical Thinking:** Political Science students will develop the capacity to think critically about local, state, national, and global politics. (UG 2)
- **Effective Communication:** Political Science students will be able to present and defend their ideas, the information that they have acquired, and the analyses developed while utilizing scholarly approaches in political science. (UG 1)
- **Research Skills:** Political Science students will demonstrate competency with basic tools underlying modern social and political science research, including proficiency in both quantitative and qualitative analysis, which will allow students to ask and answer basic political questions. (UG 3, UG 4)
- **Engagement in Politics:** Political Science students will be prepared for active citizenship and demonstrate an ongoing interest in local, state, national and global politics. (UG 7)

## RELATED LINKS

Political Science, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/political-science/>)

Political Science Department Page (<https://www.sru.edu/academics/colleges-and-departments/cia/departments/political-science/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## CURRICULUM GUIDE

### GPA REQUIREMENT

Major GPA: 2.00 or higher  
Overall GPA: 2.00 or higher

### SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Modern Language Requirement	0-9
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	39
	Electives	39

### ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		

Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
Complete 0-9 credits		0-9
<b>Total Hours</b>		<b>0-9</b>

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this

requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

Revised 12.20.2022

UCC 10.25.2022/11.29.22

## MAJOR REQUIREMENTS

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Major Requirements</b>		
<i>Political Science Core Coursework</i>		
POLS 101	American National Government <sup>1</sup>	3
POLS 103	International Relations <sup>1</sup>	3
POLS 255	Introduction to Public Policy <sup>1</sup>	3
POLS 263	Introduction to Comparative Politics <sup>1</sup>	3
POLS 310	Research Methods <sup>1</sup>	3
POLS 444	Capstone: Political Analysis <sup>1</sup>	3
<i>Professional Politics Concentration Required Coursework</i>		
<b>Required Courses</b>		
POLS 200	State and Local Government <sup>1</sup>	3
POLS 301	Organized Political Action <sup>1</sup>	3
POLS 328	Assessing Public Opinion <sup>1</sup>	3
POLS 372	Campaign Management & Strategy <sup>1</sup>	3
Select 3 credits in Political Institutions		3
POLS 223	Law and Courts <sup>1</sup>	
POLS 321	The Presidency <sup>1</sup>	
POLS 325	The Congress <sup>1</sup>	
Select 6 credits in Professional Politics-Related Electives		6
POLS 303	Seminar in Democracy <sup>1</sup>	
POLS 329	Political Learning <sup>1</sup>	
POLS 450	Internship <sup>1</sup>	
NLPA 120	Civic Engagement and Community Decision-Making <sup>1</sup>	
NLPA 220	Introduction to Nonprofit Management <sup>1</sup>	
NLPA 320	Community Change and Development <sup>1</sup>	
<b>Total Hours</b>		<b>39</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Political Science BA (5 68) with Concentration in Professional Politics (PRPL)

This program is effective as of Summer 2021

## RECOMMENDED FOUR-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
POLS 101	American National Government	3
ENGL 102	Critical Writing *	3
MODL 1XX	Language and Culture I, II, or III	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
POLS 103	International Relations	3
POLS 110	Foundations of Political Science	3
MODL 1XX	Language and Culture I, II, or III	3
ENGL 104	Critical Reading	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
POLS 255	Introduction to Public Policy	3
POLS 263	Introduction to Comparative Politics	3
MODL 1XX	Language and Culture I, II, or III	3
Social Science Inquiry (p. 29)		3
Creative & Aesthetic Inquiry (p. 29)		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
POLS 310	Research Methods	3
POLS 2XX	Concentration Requirement	3
MATH 117	Quantitative Reasoning	3
Thematic Thread Requirement (p. 29)		3
Elective/Minor/Certificate/Second Major		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
POLS 3XX/4XX	Concentration Requirement	6
SCI 101	Science of Life	3
Elective/Minor/Certificate/Second Major		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
POLS 3XX/4XX	Concentration Requirement	6
Thematic Thread Requirement (p. 29)		3
SCI 102	Understanding the Physical World	3
Elective/Minor/Certificate/Second Major		3
<b>Hours</b>		<b>15</b>



**Fourth Year****Fall**

POLS 444	Capstone: Political Analysis	3
POLS 3XX/4XX	Concentration Requirement	3
Thematic Thread Requirement (p. 29)		3
Free/Minor/Certificate/Second Major		6

<b>Hours</b>	<b>15</b>
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**Spring**

Free/Minor/Certificate/Second Major		12
POLS	Concentration Elective	3

<b>Hours</b>	<b>15</b>
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<b>Total Hours**</b>	<b>120</b>
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<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 5 68

Concentration Code: PRPL

Revised: 10.18.2021

## Political Science, Bachelor of Arts (BA) - Concentration in Public Policy

### PROGRAM LEARNING OUTCOMES

- Substantive Knowledge: Political Science students will demonstrate substantive knowledge of institutions, processes and values that shape politics within and among states, and the major theories, concepts, foundations, and methodologies used in the study of politics. (UG 9)
- Critical Thinking: Political Science students will develop the capacity to think critically about local, state, national, and global politics. (UG 2)
- Effective Communication: Political Science students will be able to present and defend their ideas, the information that they have acquired, and the analyses developed while utilizing scholarly approaches in political science. (UG 1)
- Research Skills: Political Science students will demonstrate competency with basic tools underlying modern social and political science research, including proficiency in both quantitative and qualitative analysis, which will allow students to ask and answer basic political questions. (UG 3, UG 4)
- Engagement in Politics: Political Science students will be prepared for active citizenship and demonstrate an ongoing interest in local, state, national and global politics. (UG 7)

### RELATED LINKS

Political Science, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/political-science/>)

Political Science Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/political-science/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

### CURRICULUM GUIDE

#### GPA REQUIREMENT

Major GPA: 2.00 or higher

Overall GPA: 2.00 or higher

#### SUMMARY\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Modern Language Requirement	0-9
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major Requirements	39
	Electives	39

#### ROCK STUDIES 2 REQUIREMENTS

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15

#### Integrated Inquiry

<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Sciences Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Sciences Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

- <sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
Complete 0-9 credits		0-9
<b>Total Hours</b>		<b>0-9</b>

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## MAJOR REQUIREMENTS

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Major Requirements</b>		
<i>Political Science Core Coursework</i>		
POLS 101	American National Government <sup>1</sup>	3
POLS 103	International Relations <sup>1</sup>	3
POLS 255	Introduction to Public Policy <sup>1</sup>	3
POLS 263	Introduction to Comparative Politics <sup>1</sup>	3
POLS 310	Research Methods <sup>1</sup>	3

POLS 444	Capstone: Political Analysis <sup>1</sup>	3
<i>Public Policy Concentration Required Coursework</i>		
<b>Required Courses</b>		
POLS 351	Politics of Race <sup>1</sup>	3
POLS 359	Policy Analysis and Evaluation <sup>1</sup>	3
POLS 364	Using Evidence to Solve Public Problems <sup>1</sup>	3
Select 3 credits in Substantive Policy coursework		3
POLS 303	Seminar in Democracy <sup>1</sup>	
POLS 398	Selected Topics <sup>1</sup>	
POLS 450	Internship <sup>1</sup>	
Select 9 credits in Public Policy-Related Electives		9
POLS 200	State and Local Government <sup>1</sup>	
POLS 301	Organized Political Action <sup>1</sup>	
POLS 328	Assessing Public Opinion <sup>1</sup>	
POLS 365	International Political Economy <sup>1</sup>	
POLS 367	National and International Security: Problems and Issues <sup>1</sup>	
POLS 369	Politics of Developing Areas <sup>1</sup>	
ECON 312	Critical Choices in Health Care Policy <sup>1</sup>	
GES 324	Environmental Law and Policy <sup>1</sup>	
GES 325	Introduction to Geographic Information Science <sup>1</sup>	
GES 344	Environmental Justice <sup>1</sup>	
INDP 304	Urban Sociology <sup>1</sup>	
INDP 309	Health and Society <sup>1</sup>	
NLPA 230	Introduction to Public Administration <sup>1</sup>	
NLPA 328	Program Design and Evaluation in Nonprofit and Governmental Organizations <sup>1</sup>	
<b>Total Hours</b>		<b>39</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

Political Science BA (5 68) with Concentration in Public Policy (PUPL)

This program is effective as of Summer 2021

Revised 12.20.2022

UCC 10.25.2022\11.29.2022

## RECOMMENDED FOUR-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
POLS 101	American National Government	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
MODL 1XX	Language and Culture I, II, or III	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
POLS 103	International Relations	3
POLS 110	Foundations of Political Science	3
MODL 1XX	Language and Culture I, II, or III	3
ENGL 104	Critical Reading	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
POLS 255	Introduction to Public Policy	3
POLS 263	Introduction to Comparative Politics	3
MODL 1XX	Language and Culture I, II, or III	3
Social Science Inquiry (p. 29)		3
Creative & Aesthetic Inquiry (p. 29)		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
POLS 310	Research Methods	3
POLS 2XX	Concentration Requirement	3
MATH 117	Quantitative Reasoning	3
Thematic Thread Requirement (p. 29)		3
Elective/Minor/Certificate/Second Major		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
POLS 3XX/4XX	Concentration Requirement	6
SCI 101	Science of Life	3
Elective/Minor/Certificate/Second Major		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
POLS 3XX/4XX	Concentration Requirement	6
Thematic Thread Requirement (p. 29)		3
SCI 102	Understanding the Physical World	3
Elective/Minor/Certificate/Second Major		3
<b>Hours</b>		<b>15</b>

### Fourth Year

#### Fall

POLS 444	Capstone: Political Analysis	3
POLS 3XX/4XX	Concentration Requirement	3
Thematic Thread Requirement (p. 29)		3
Free/Minor/Certificate/Second Major		6
<b>Hours</b>		<b>15</b>

#### Spring

Free/Minor/Certificate/Second Major		12
POLS	Concentration Elective	3
<b>Hours</b>		<b>15</b>
<b>Total Hours**</b>		<b>121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 5 68

Concentration Code: PUPL

Revised: 10.18.2021

## Political Science, Minor

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Political Science, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/political-science/>)

Political Science Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/political-science/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU
- A minimum of 6 credit hours must be upper
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Minor Requirement</b>		
Select six courses of the following; no more than nine (9) of the eighteen (18) credits may be in any one of the Area Elective blocks:		18
<i>American Political Institutions</i>		
POLS 101	American National Government	
POLS 200	State and Local Government	
POLS 223	Law and Courts	
POLS 321	The Presidency	
POLS 325	The Congress	
<i>Political Theory and Thought</i>		
POLS 110	Foundations of Political Science	
POLS 215	Introduction to Political Theory	
POLS 303	Seminar in Democracy	
POLS 349	Utopian Experiments: Issues of Gender and Power	
<i>International Relations and Politics</i>		
POLS 103	International Relations	
POLS 220	Foreign Policy	
POLS 322	The United Nations and International Law	
POLS 350	Transnational Terrorism	
POLS 365	International Political Economy	
POLS 367	National and International Security: Problems and Issues	
<i>Comparative Politics</i>		
POLS 263	Introduction to Comparative Politics	
POLS 370	Latin American Politics and Development	
<i>Public Policy and Law</i>		
POLS 255	Introduction to Public Policy	
POLS 357	Civil Liberties and Civil Rights	
POLS 359	Policy Analysis and Evaluation	
POLS 364	Using Evidence to Solve Public Problems	
<i>Political Behavior</i>		
POLS 301	Organized Political Action	
POLS 306	Campaigns & Elections	
POLS 310	Research Methods	
POLS 327	Public Opinion and Political Attitudes	
POLS 328	Assessing Public Opinion	
POLS 329	Political Learning	
POLS 333	The Political Film	
POLS 351	Politics of Race	
POLS 354	Seminar in Religion and Politics	
POLS 356	Gay and Lesbian Politics	
POLS 369	Politics of Developing Areas	
POLS 372	Campaign Management & Strategy	
POLS 375	Women and Politics	

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN POLITICAL SCIENCE (68C)

This program is effective as of Fall 2019

Revised 10-2019

UCC 9.10.2019

## Theatre

Chair	Secretary	Location	Department Phone
Dr. David Skeele	Melanie Martin	139 West Stoner Performing Arts Complex	724-738-2090

Department Web Site URL (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/theatre/>)

Department Fact Sheet URL (<https://www.sru.edu/Documents/programs/factsheets/undergraduate/theatre-fs.pdf>)

## Faculty

### Aaron Galligan-Stierle

Assistant Professor

Theatre

M.F.A., Penn State University

B.F.A., Shenandoah University

### Mary Hodson

Instructor

Theatre

M.F.A., University of Illinois

B.A., University of Missouri

### Kari-Anne Innes

Assistant Professor

Theatre

Ph.D., Bowling Green State University

M.A., Valparaiso University

B.A., Valparaiso University

### Samantha Kuchta

Assistant Professor

Theatre

M.F.A., University of Georgia

B.A., Slippery Rock University

### Julianne Leddy

Instructor

Theatre

### Rebecca Morrice

Professor

## Theatre

M.F.A., University of Illinois

B.A., University of Illinois

**Kerri Packard**

Instructor

Theatre

**Emily Scott**

Instructor

Theatre

M.M., Arizona State University

B.F.A., Carnegie Mellon University

**David Skeeel**

Professor

Theatre

Ph.D., University of Pittsburgh

M.F.A., University of New Orleans

M.A., Smith College

B.A., Marlboro College

**Laura Smiley**

Associate Professor

Theatre

M.F.A., University of Pittsburgh

B.F.A., Catholic University of America

## Programs

### Majors

- Acting, Bachelor of Fine Arts (BFA) - Concentration in Acting (p. 1087)
- Acting, Bachelor of Fine Arts (BFA) - Concentration in Musical Theatre (p. 1090)
- Theatre, Bachelor of Arts (BA) - Concentration in Acting (p. 1093)
- Theatre, Bachelor of Arts (BA) - Concentration in Design & Technology (p. 1096)
- Theatre, Bachelor of Arts (BA) - Concentration in Theatre Arts Management (p. 1099)
- Theatre, Bachelor of Arts (BA) - Concentration in Theatre Studies (p. 1102)

### Minors

- Theatre, Minor (p. 1105)

## Courses

**THEA 130 - Art of Theatre**

This course will use elements of theatre - acting, playwriting, directing, producing, design and technology – to illustrate how the arts connect to the culture and community in which they exist. Historical trends and the role of the arts in society will be a focus. This course is designed to guide students toward a lifelong curiosity about the arts. A lecture course; no performance skills required. Studying and experiencing the arts, including dance, music, theatre, and the visual arts, develops creative and aesthetic abilities. The arts introduce students not only to artists and their creations, but also to history, cultures, values, technique, imagination, creativity, and issues relevant to society. Students will gain an understanding of the creative process and how to analyze and interpret message and meaning in works of art. While the arts can bring us pleasure, they can also serve to enlighten and illuminate critical issues, lead to personal discoveries, and foster innovation in all fields. Students will learn to think critically about the arts, develop an appreciation for artistic creations, and by viewing live performances and exhibitions, become engaged audience members. Arts inquiry courses use and develop the analytic and interpretive modes of inquiry needed to understand and explore both tangible and abstract artistic works and the cultures in which they exist. In arts inquiry courses, students confront a variety of cultural and artistic expressions in order to gain an understanding of the human condition, and ultimately express their relationship to artistic work, meaning, and the creative process. Attendance at arts events will be required during this course and may require a fee.

Credits: 3

Term(s) Typically Offered: Offered Every Term

**THEA 131 - Fundamentals of Acting**

An introduction to the theory and practice of acting.

Credits: 3

Term(s) Typically Offered: Offered Fall &amp; Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course

**THEA 132 - Stagecraft**

Fundamentals of modern set construction, stage lighting, properties, and costume practice. Students assist with current productions in laboratory sessions.

Credits: 3

Term(s) Typically Offered: Offered Fall &amp; Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course



**THEA 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**THEA 142 - Wellness for the Actor**

Wellness for the Actor is a foundation class that establishes a physical, mental, and emotional wellness practice that supports advanced training in voice, movement and acting. In the course students will learn to: foster fuller breathing to connect body and mind as a practice for grounding and centering; create a stronger and more versatile physical body; learn physical conditioning practices; gain experience calming the mind and emotional body; study the practice of personal nutrition to enhance general health; and develop their ability to become attuned and connected to their physical self.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students in the BFA 5390 program.

Enrollment limited to students with department of Theatre.

**THEA 145 - Musicianship for Musical Theatre**

This course focuses on the development of vocal performance techniques through training in aural and sight-singing skills including solfege, rhythmic notation, ear training, tempo, meter and dictation. Students will expand their understanding of harmonic progression, body alignment, muscle memory, and technical accuracy. Basic piano skills will also be covered.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment is limited to students with a program in Musical Theatre.

Enrollment limited to students in the BFA 5390 program.

**THEA 146 - Class Voice For Musical Theatre**

This course focuses on musical theatre singing technique, skills, and styles for entry-level performers. In addition, the course is designed to familiarize students with industry practices in the field of professional musical theatre performance. Students become familiar with basic concepts of voice production as well as developing an understanding and awareness of vocal health issues. Additionally, students are exposed to a variety of musical theatre popular sung repertory while they are encouraged to develop perceptive listening skills by interacting and responding to their peers in class.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment is limited to students with a program in Musical Theatre.

Enrollment limited to students in the BFA 5390 program.

Enrollment limited to students in a Bachelor of Fine Arts degree.

Enrollment limited to students in the College of Liberal Arts college.

**THEA 151 - Rehearsal and Production**

Supervised experience in theatre performance and stagecraft by acting or crew participation in one Department of Theatre production. Prospective actors will have to participate in a competitive audition. May be repeated for a maximum of 12 credits.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

**THEA 159 - Introduction to Theatre Arts Management**

This course covers the basic principles, theories, concepts, processes, and practices relating to organizations in the arts industry, with a focus on the theatre industry. Topics include the structure of arts industries, organizational structures, leadership, staffing, volunteerism, fund raising, intellectual property, grants writing, advocacy, etc.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Thematic Thread(s): Institutions & Human Innovations, Transfer Thread Completion Course

**THEA 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**THEA 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**THEA 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**THEA 215 - Drawing/Drafting/CAD**

Principles and techniques used for the creation and implementation of theatrical designs. Introduction to design elements and techniques, drawing, rendering, and computer-aided drafting. Emphasis on set, costume, lighting and property designs.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course

**THEA 222 - Acting II**

Intermediate-level course designed to continue the actor training begun in THEA 131. Emphasis on realistic acting techniques.

Prerequisite: THEA 131<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**THEA 235 - Costume Technology**

Basic techniques of constructing costumes for the stage, emphasizing sewing, pattern making and cutting, draping. Includes the study of fabrics, millinery, and accessories.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course

**THEA 244 - Acting for Song I**

A course designed to synthesize the process of acting through song. Students will apply various acting and singing methodologies to connect to the emotional, physical and vocal requirements of both character and song.

Prerequisites: THEA 145<sup>C</sup> and THEA 222<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

Enrollment is limited to students with a program in Musical Theatre.

Enrollment limited to students in the BFA 5390 program.

Enrollment limited to students with department of Theatre.

**THEA 246 - Private Musical Theatre Voice**

Students will continue to develop musicianship, sight singing and vocal skills through individualized training designed to match their vocal range and skills. Repeatable up to 6 credits.

Prerequisites: THEA 145<sup>C</sup> and THEA 146<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Enrollment is limited to students with a program in Musical Theatre.

Enrollment limited to students in the BFA 5390 program.

Enrollment limited to students in the College of Liberal Arts college.

**THEA 254 - Musical Theatre Dance I**

Musical Theatre Dance I will introduce the students to the fundamentals of dance for musical theatre performance, including jazz, tap, ballroom, and hip hop. Students will learn correct alignment and techniques applicable to all musical theatre genres, and apply those principles to the dance styles found within those genres.

Prerequisite: DANC 125<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 2

Term(s) Typically Offered: Offered as Needed

Enrollment is limited to students with a program in Musical Theatre.

Enrollment limited to students in the BFA 5390 program.

**THEA 269 - Playwriting**

An introduction to the fundamentals of playwriting, including clear storytelling, character development, scene structure and style. The particular demands of writing in a theatrical medium, as distinct from film, television or novel, will be emphasized.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Thematic Thread(s): Cultural Literacy & Community Building,

Conservation, Technology & Imagination, Transfer Thread Completion Course

**THEA 281 - Survey of Dramatic Literature I**

Analysis and discussion of some of history's most celebrated works of dramatic literature, ranging from classical drama to drama of the eighteenth century. Texts will be examined within the historical context of the cultures that produced them, and in light of their respective theatrical conditions, performance styles, etc. Emphasis will also be placed on various methods of textual analysis.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**THEA 283 - Survey of Dramatic Literature II**

Analysis and discussion of some of history's most celebrated works of dramatic literature, ranging from the early 18th century to the most exciting and groundbreaking contemporary drama. Texts will be examined within the historical context of the cultures that produced them, and in light of their respective theatrical conditions, performance styles, etc. Emphasis will also be placed on various methods of textual analysis.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**THEA 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**THEA 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**THEA 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**THEA 303 - Acting III**

Acting III is an advanced-level course designed to give the performer facility with the acting approach known as Meisner Technique.

Prerequisite: THEA 222<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

Enrollment limited to students in the BFA 5390 program.

Enrollment limited to students with department of Theatre.

**THEA 304 - Acting for Song II**

A continuation of Acting for Song I. Students will undergo advanced study in synthesizing the process of acting through song. Students will apply advanced acting and singing methodologies to connect to the emotional, physical and vocal requirements of both character and song.

Prerequisite: THEA 244<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

Enrollment is limited to students with a program in Musical Theatre.

Enrollment limited to students in the BFA 5390 program.

Enrollment limited to students with department of Theatre.

**THEA 322 - Acting Technique**

An intensive focus on one or more of the following: role preparation, scene study, physical disciplines of acting. Approach varies from offering to offering. May be repeated for credit three times.

Prerequisite: THEA 222<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 324 - Stage Makeup**

Theory, practice, and materials of stage make-up. Practical application is mandatory and extensive; students will analyze various characters and design makeup for them.

Prerequisites: THEA 131<sup>D</sup> and THEA 151<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 328 - Acting Shakespeare**

An advanced-level course designed to provide the student with tools for the analysis and performance of the plays of Shakespeare.

Prerequisite: THEA 222<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 329 - Shakespeare Tour**

An ensemble composed of actors and technicians, selected by audition and interview, performing Shakespeare-based scripts in the community and region. May be repeated twice for credit.

Prerequisite: THEA 328<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 330 - Voice and Movement for the Actor**

Introduction to disciplines of voice and movement essential for the well-prepared actor. Emphasis will be on performance rather than theory.

Prerequisite: THEA 131<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 332 - Advanced Stagecraft**

Advanced methods and materials of stagecraft: emphasis on furniture, metals, projected scenery, unusual rigging situations, hydraulics, computer applications, and special effects.

Prerequisite: THEA 132<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 333 - Scene Design**

The principles and application of design for stage, emphasizing sketches, diagrams, drafting, and model making.

Prerequisite: THEA 215<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 334 - Stage Lighting**

The theory and practice of stage lighting as practiced in modern theatre.

Prerequisite: THEA 215<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 335 - Costume Design and History**

A survey of costume history from the ancient world to the present with an emphasis on social, political, religious, and technological conditions. The process of costume design will be explored using the principles of variety and order, character analysis, period research, and the elements of design.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 337 - Directing**

The theory and practice of directing for the modern theatre.

Prerequisites: THEA 131<sup>D</sup> and THEA 132<sup>D</sup> and THEA 151<sup>D</sup> and (THEA 281<sup>D</sup> or THEA 283<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 339 - New Play Development**

This course is designed for actors, directors, and designers to learn how to collaborate with a playwright on a new work and to successfully mount a production of this new work. Students participate through a collaborative process of rehearsal and design, problem-solving and experimentation. Class culminates in a public performance on campus and perhaps another local venue. Student should be a theatre major. Permission of instructor via audition or portfolio review.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Theatre.

**THEA 340 - International Theatre Experience**

This course is designed for actors, designers and public relations students to create, design and market a production for overseas performance. Students participate through a collaborative process of rehearsal and design, problem-solving and experimentation. Students will also have the opportunity to participate in theater activities involving international performance groups. Class culminates in a public performance both on campus and overseas. Permission of instructor via audition or portfolio review.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students in the BA 5 92 program.

**THEA 342 - IPA/Dialects**

A course designed to train actors in phonetics, diction and dialects. Students will learn the International Phonetic Alphabet and master its use for Standard American English stage diction, as well as a variety of national variants and foreign dialects, through both phonetic notation and performance of dramatic texts.

Prerequisites: THEA 143<sup>C</sup> or THEA 353<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students in the BFA 5390 program.

**THEA 344 - Auditioning**

Students will learn techniques designed to develop skills in auditioning for theatre productions. Over the course of the semester, students will prepare a diverse repertoire of audition material, including classical and contemporary, as well as dramatic and comedic monologues. Cold readings, appearance and attire, and interview skills will also be covered.

Prerequisite: THEA 303<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students in the BFA 5390 program.

**THEA 345 - Stage Management and Safety**

Safe and effective production management on the modern stage. Safety education in shop, performance, and public spaces.

Prerequisite: THEA 132<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 347 - Auditioning for Musical Theatre**

This class will explore personal relationships between performer and song as well as develop reading skills to learn performance readiness. Active performance and application of feedback are core to this work, as well as understanding techniques and the vocabulary of a musical theatre audition. Students will learn how to choose well-suited songs and develop an audition book comprising of different styles.

Prerequisites: THEA 304<sup>C</sup> and THEA 303<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Musical Theatre.

Enrollment limited to students in the BFA 5390 program.

**THEA 348 - Musical Theatre Repertory**

Musical Theatre Repertory is an advanced-level course designed to provide the musical theatre performer with a series of individually-tailored audition pieces, while also providing a thorough grounding in the historical background and stylistic demands of the various musical theatre genres. Students will develop solo performance pieces drawn from all major musical theatre styles, including "golden age," contemporary, rock, hip-hop, etc.

Prerequisite: THEA 244<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Musical Theatre.

Enrollment limited to students in the BFA 5390 program.

Enrollment limited to students in the College of Liberal Arts college.

**THEA 351 - Movement for the Actor**

Movement for the Actor is an advanced-level course designed to facilitate and develop expressive, responsive movement in the stage performer. In addition to learning a battery of stretching and strengthening exercises, the student will explore physical character development through approaches such as Feldenkrais, "authentic movement" and Chekhov Technique.

Prerequisite: THEA 303<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

Enrollment limited to students in the BFA 5390 program.

**THEA 353 - Voice for the Actor**

Voice for the Actor: A study of breath and vocal work that will inform explorations to develop awareness of the voice and body and how that connects to vocal energy. This will foster breath support, range and stamina. Students will learn the basics of vocal anatomy as well as develop skills for healthy vocal usage.

Prerequisite: THEA 303<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Theatre or Acting.

Enrollment limited to students in a Bachelor of Arts or Bachelor of Fine Arts degrees.

Students in the College of Liberal Arts college may **not** enroll.

**THEA 354 - Musical Theatre Dance II**

Musical Theatre Dance II will continue the exploration of jazz, tap, ballroom and hip hop dance begun in Musical Theatre Dance I. This second level technique course will continue to refine the student's skills in performance and stylistic techniques.

Prerequisite: THEA 254<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 2

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

Enrollment is limited to students with a program in Musical Theatre.

Enrollment limited to students in the BFA 5390 program.

**THEA 355 - Projects in Theatre**

The study and performance of a major role in a Department of Theatre production, or participation in a production as a crew head with significant responsibility, or planning and execution of a study of moderate scope in the history, literature, or criticism of the theatre. May be taken for credit four times for a maximum of 6 credits. Junior standing and permission of the instructor.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 359 - Studies in Audience Development**

An advanced-level course focusing on audience development strategies for arts institutions.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 369 - Advanced Playwriting**

An advanced class devoted to building upon fundamental skills learned in Playwriting (93 269), such as characterization, plot structure, exposition, etc.

Prerequisite: THEA 269<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 370 - Playwriting Genres and Styles**

An advanced class devoted to exploring one or more of the following advanced topics: playing genres, devised theatre, documentary theatre, non-realistic writing, non-traditional structures and forms.

Prerequisite: THEA 369<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 372 - Senior Seminar in Playwriting**

An advanced-level seminar for senior playwriting majors, in which major playwriting projects are shared and developed.

Prerequisite: THEA 369<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum. Permission of instructor via audition or portfolio review.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**THEA 392 - History of Musical Theatre**

This survey course will explore the historical use of music in drama with a focus on the invention, development and masterworks of the American musical genre. Major genres, composers, lyricists, librettists, directors, choreographers, and performers will be discussed. The socio-historical context of various musicals will be explored through the literature of the genre.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 393 - History of Theatre Design and Architecture**

A review of the history and evolution of scene, costume, lighting, prop and sound design for the theatre. Course will also examine the evolution of theatre spaces, from the outdoor theatre of the Ancient Greeks to traveling wagon stages of the medieval period to modern architectural trends. The course will examine non-western forms of theatre such as aboriginal and African theatre as well as western world theatre traditions.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 394 - Theories of Acting and Directing**

A history of the art, craft and theories of acting. Also, a historical investigation into the role of the "director" in pre-modern theatre and the evolution into its present predominant place in contemporary theatre.

Prerequisites: THEA 281<sup>D</sup> or THEA 283<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 425 - Professional Theatre Practice**

A study of the working conditions of the professional actor, designer, technician, and director in the contemporary theatre. Preparation for effective career development.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**THEA 442 - Senior Showcase**

This course is designed to give each graduating BFA Acting student the opportunity to prepare for and perform in a showcase as a step towards establishing their professional career. The showcase will invite theatre professionals such as agents, producers, casting directors, and directors to attend and will be presented in a major metropolitan area and on campus. The course also builds on the foundational practices of working in professional theatre. Professional headshots will be required.

Prerequisites: THEA 344<sup>C</sup> or THEA 347<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students in the BFA 5390 program.

Enrollment limited to students with department of Theatre.

**THEA 450 - Internship**

Supervised placement in a working theatre situation off campus. Extensive and successful experience in theatre performance on campus, 2.000 GPA overall and in all theatre courses attempted, and permission of the department's curriculum committee.

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 490 - Independent Study**

A faculty-supervised project in an advanced area of theatre studies carried out independently by a qualified upper-class student. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Acting, Bachelor of Fine Arts (BFA) - Concentration in Acting

### Program Learning Outcomes

#### Acting – ACTING CORE, BA and BFA

Students in the BA Acting and BFA Acting programs will acquire the techniques necessary for the confident, skilled performance of dramatic roles (U01, U02, U05, U06, U09). Students will:

- gain the tools to analyze and develop characters, and to create a meaningful personal connection to their roles;
- master the ability to listen and respond truthfully in the moment;
- gain the tools necessary to achieve a flexible, strong, and controlled voice and body to be used effectively as instruments for characterization.

#### ACTING – Acting Concentration, BFA

Students in the BFA Acting, Acting concentration will acquire the specific skills necessary for a career as a theatre performer (U01, U02, U05, U06). Students will:

- achieve the highest possible level of performance as an actor;
- achieve professional, entry-level competence in acting including significant technical mastery, and the capability to solve professional problems independently.

#### THEATRE DEPARTMENT, OVERALL

- **Communication (U01, U02):** Students will learn to communicate effectively by developing and defending informed viewpoints about theatre. Students will gain an understanding of the common elements and vocabulary of theatre and of the interaction of these elements, giving them the ability to analyze both dramatic literature and live performance perceptively and to evaluate them critically.
- **Creation/Production/Performance (U02, U05, U06, U08, U09):** Students will gain an overview of the collaborative elements of theatre and will demonstrate an understanding of the production process. Students will explore and experience different values, perspectives, and aesthetics allowing them to problem solve, create, perform and produce theatre. Students will successfully execute job duties related to the performance of a role, crew position and/or design assignment.
- **Professional Proficiency (U05, U08):** Students will acquire the entrepreneurial skills necessary to assist in the development and advancement of careers in theatre. Students will learn to apply knowledge and skills to meet professional competencies in the field of theatre. Students will learn procedures and develop skills that enable them to conduct themselves in a manner accepted in the professional theatre community.

- **Historical Knowledge (U02, U05, U09):** Students will acquire familiarity with theatre literature of various historical periods, cultural sources, and modes of presentation. Students will learn the essential elements of the historical development of theatre and drama. Students will relate, connect, integrate, and contextualize knowledge acquired in theatre courses.
- **Degree Program Writing Competency (U01, U02, U05):** Students will gain the ability to write clearly and effectively.

## Related Links

Acting, BFA Program Page ([https://www.sru.edu/academics/majors-and-minors/theatre-bfa-acting-\(acting\)/](https://www.sru.edu/academics/majors-and-minors/theatre-bfa-acting-(acting)/))

Theatre Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/theatre/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 3.00 or higher

Overall GPA: 2.00 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirments	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	78

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Science Inquiry</i>		
SCI 101	Science of Life	3

Physical Science Inquiry		
SCI 102	Understanding the Physical World	3
Subtotal		15
Thematic Thread		
Select 12 Credits (p. 29) <sup>2</sup>		12
Subtotal		12
Total Hours		42

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.
- <sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
Total Hours		0-3

Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
Total Hours		0-3

DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

Writing Competency Requirements

Requirement	Course	Grade
Scholarly Paper in MLA format		ASPM
Professional Resume		APR
Professional Cover Letter		APCL

Major/Concentration Requirements

- 39 major credits must be taken at SRU or PASSHE
- 39 major credits must be taken at the 300 level or above

Code	Title	Hours
Core Requirements		
DANC 125	Experiencing Dance: Techniques and Styles	3
THEA 132	Stagecraft	3
THEA 133		3
THEA 142	Wellness for the Actor	3
THEA 222	Acting II	3
THEA 281	Survey of Dramatic Literature I	3
THEA 283	Survey of Dramatic Literature II	3
THEA 303	Acting III	3
THEA 324	Stage Makeup	3
THEA 337	Directing	3
THEA 351	Movement for the Actor	3
THEA 353	Voice for the Actor	3
THEA 404		
THEA 425	Professional Theatre Practice	3
THEA 442	Senior Showcase	3
Subtotal		42
Acting Concentration Core		
THEA 310		3
THEA 322	Acting Technique <sup>Repeat 3 times.</sup>	9
THEA 328	Acting Shakespeare	3
THEA 342	IPA/Dialects	3
THEA 344	Auditioning	3
THEA 394	Theories of Acting and Directing	3
Subtotal		24
Electives		
Health and Fitness Elective		
Select one course from the following:		3
EXSC 230	Stress Management	
HLTH 101	Personal Health	
PE 342	Wellness through Movement	
Career Enhancement Elective		
Select one course from the following:		6
THEA 159	Introduction to Theatre Arts Management	
THEA 215	Drawing/Drafting/CAD	
THEA 235	Costume Technology	
THEA 269	Playwriting	
THEA 332	Advanced Stagecraft	
THEA 333	Scene Design	
THEA 334	Stage Lighting	
THEA 335	Costume Design and History	
THEA 345	Stage Management and Safety	
THEA 359	Studies in Audience Development	
THEA 392	History of Musical Theatre	
THEA 498	Selected Topics (Scene Painting)	
Advanced Acting Electives		
Select six credits from the following:		6
DANC XXX	Dance course <sup>1</sup>	

THEA 145	Musicianship for Musical Theatre <sup>Requires permission of the instructor</sup>
THEA 151	Rehearsal and Production
THEA 244	Acting for Song I <sup>Requires permission of instructor</sup>
THEA 246	Private Musical Theatre Voice <sup>Requires permission of the instructor</sup>
THEA 248	
THEA 254	Musical Theatre Dance I
THEA 322	Acting Technique <sup>Course is repeatable for a maximum of 12 credits</sup>
THEA 329	Shakespeare Tour
THEA 339	New Play Development
THEA 340	International Theatre Experience
THEA 348	Musical Theatre Repertory
THEA 354	Musical Theatre Dance II
THEA 355	Projects in Theatre
THEA 450	Internship
THEA 490	Independent Study
THEA 498	Selected Topics
Subtotal	15
<b>Total Hours</b>	<b>81</b>

<sup>1</sup> Choose from DANC 125, DANC 220, DANC 222, DANC 222, DANC 224, DANC 298, DANC 305, DANC 320, DANC 321, DANC 322, DANC 420, DANC 421, DANC 422, DANC 424, DANC 426, DANC 428.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs International study programs (including Edinburgh, Scotland, Fringe Festival Trip)
2. SRU Theatre Department Productions
3. Theatre internships and summer theatre employment
4. High-Impact Practice (HIP) designated classes
5. Student-faculty research
6. Student leadership development
7. Department field trips
8. Theatre Department Student Staff
9. Student Lab Productions in Sheehy Theatre
10. Guest Artist lectures, workshops, and productions

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information*

*on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

ACTING- BFA (5390)

Concentration in Acting (THPE)

This program is effective as of Fall 2022.

Revised 03.03.2023

UCC 02.14.2023

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
THEA 131	Fundamentals of Acting	3
THEA 142	Wellness for the Actor (F)	3
DANC 125	Experiencing Dance: Techniques and Styles	3
ENGL 102	Critical Writing <sup>1</sup>	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>16</b>

### Spring

THEA 132	Stagecraft	3
THEA 222	Acting II (S) <sup>1</sup>	3
ENGL 104	Critical Reading <sup>1</sup>	3
MATH 117	Quantitative Reasoning	3
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>15</b>

### Second Year

#### Fall

THEA 281	Survey of Dramatic Literature I (F)	3
THEA 322	Acting Technique (F)	3
Creative & Aesthetic Inquiry (p. 29)		3
SCI 101	Science of Life	3
Select one of the following:		3

COMM 200	Civil Discourse: Theory & Practice
PHIL 110	Ethics and Civil Discourse
POLS 235	Civil Discourse and Democracy

Declare a Thematic Thread <sup>2</sup>

<b>Hours</b>		<b>15</b>
<b>Spring</b>		
THEA 283	Survey of Dramatic Literature II (S)	3
THEA 324	Stage Makeup (S)	3
THEA 328	Acting Shakespeare	3
SCI 102	Understanding the Physical World	3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>

### Third Year

#### Fall

THEA 303	Acting III (F) <sup>1</sup>	3
THEA 322	Acting Technique (F)	3
THEA 342	IPA/Dialects (F)	3

THEA 353	Voice for the Actor <sup>1</sup>	3
THEA 394	Theories of Acting and Directing (F)	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
THEA 337	Directing (S)	3
THEA 344	Auditioning (S) <sup>1</sup>	3
THEA 351	Movement for the Actor (S)	3
THEA 355	Projects in Theatre	2
Acting Elective		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>17</b>
<b>Fourth Year</b>		
<b>Fall</b>		
THEA 322	Acting Technique (F)	3
THEA 425	Professional Theatre Practice (F)	3
Acting Electives		4
Social Science Inquiry (p. 29)		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
THEA 442	Senior Showcase (S)	3
Acting Electives		6
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>12</b>
<b>Total Hours**</b>		<b>121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

! Indicates a course which requires a grade of C or better.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 5390

Concentration Code: THPE

Revised date: 06.01.2022

## Acting, Bachelor of Fine Arts (BFA) - Concentration in Musical Theatre

### Program Learning Outcomes

#### Acting – ACTING CORE, BA and BFA

Students in the BA Acting and BFA Acting programs will acquire the techniques necessary for the confident, skilled performance of dramatic roles (U01, U02, U05, U06, U09). Students will:

- gain the tools to analyze and develop characters, and to create a meaningful personal connection to their roles;

- master the ability to listen and respond truthfully in the moment;
- gain the tools necessary to achieve a flexible, strong, and controlled voice and body to be used effectively as instruments for characterization.

#### ACTING – Musical Theatre Concentration, BFA

Students in the BFA Acting, Musical Theatre Performance concentration will acquire the specific skills necessary for a career as a musical theatre performer (U01, U02, U05, U06). Students will:

- achieve the highest possible level of performance as an actor-singer.
- achieve professional, entry-level competence in musical theatre including significant technical mastery, and the capability to solve professional problems independently.

#### THEATRE DEPARTMENT, OVERALL

- **Communication (U01, U02):** Students will learn to communicate effectively by developing and defending informed viewpoints about theatre. Students will gain an understanding of the common elements and vocabulary of theatre and of the interaction of these elements, giving them the ability to analyze both dramatic literature and live performance perceptively and to evaluate them critically.
- **Creation/Production/Performance (U02, U05, U06, U08, U09):** Students will gain an overview of the collaborative elements of theatre and will demonstrate an understanding of the production process. Students will explore and experience different values, perspectives, and aesthetics allowing them to problem solve, create, perform and produce theatre. Students will successfully execute job duties related to the performance of a role, crew position and/or design assignment.
- **Professional Proficiency (U05, U08):** Students will acquire the entrepreneurial skills necessary to assist in the development and advancement of careers in theatre. Students will learn to apply knowledge and skills to meet professional competencies in the field of theatre. Students will learn procedures and develop skills that enable them to conduct themselves in a manner accepted in the professional theatre community.
- **Historical Knowledge (U02, U05, U09):** Students will acquire familiarity with theatre literature of various historical periods, cultural sources, and modes of presentation. Students will learn the essential elements of the historical development of theatre and drama. Students will relate, connect, integrate, and contextualize knowledge acquired in theatre courses.
- **Degree Program Writing Competency (U01, U02, U05):** Students will gain the ability to write clearly and effectively.

### Related Links

Acting - Musical Theatre, BFA Program Page ([https://www.sru.edu/academics/majors-and-minors/theatre-bfa-acting-\(musical-theatre\)/](https://www.sru.edu/academics/majors-and-minors/theatre-bfa-acting-(musical-theatre)/))

Theatre Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/theatre/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

### Curriculum Guide

#### GPA Requirement

Major GPA: 3.00 or higher



Overall GPA: 2.00 or higher

## Summary\*

Code	Title	Hours
Rock Studies 2 Requirements		42
Other Basic Requirments		0-3
Computer Competency		0-3
Major/Concentration Requirements		78

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Science Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
Subtotal		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Writing Competency Requirements

Requirement	Course	Grade
Scholarly Paper in MLA format		ASPM
Professional Resume		APR
Professional Cover Letter		APCL

## Major Requirements

- 39 major credits must be taken at SRU or PASSHE
- 39 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Core Requirements</b>		
DANC 125	Experiencing Dance: Techniques and Styles	3
THEA 132	Stagecraft	3
THEA 133		3
THEA 142	Wellness for the Actor	3
THEA 222	Acting II	3
THEA 281	Survey of Dramatic Literature I	3
THEA 283	Survey of Dramatic Literature II	3
THEA 303	Acting III	3
THEA 324	Stage Makeup	3
THEA 351	Movement for the Actor	3
THEA 353	Voice for the Actor	3
THEA 404		3
THEA 425	Professional Theatre Practice	3
THEA 442	Senior Showcase	3
Subtotal		42

## Musical Theatre Concentration

THEA 145	Musicianship for Musical Theatre	3
THEA 146	Class Voice For Musical Theatre	2
THEA 147		3
THEA 244	Acting for Song I	3
THEA 246	Private Musical Theatre Voice <sup>Repeated 6 times for 6 total credits</sup>	6
THEA 248		3
THEA 304	Acting for Song II	3
THEA 347	Auditioning for Musical Theatre	3
THEA 348	Musical Theatre Repertory	3
THEA 392	History of Musical Theatre	3
Select two of the following:		4
DANC 125	Experiencing Dance: Techniques and Styles Can be repeated for a total of 9 credits	
DANC 220	Modern Dance Technique: Level II	
DANC 221	Ballet II	
DANC 222	Jazz Dance II	
DANC 224	Improvisation	
DANC 298	Selected Topics	
DANC 305	Society and Social Dance	
DANC 320	Modern Dance Technique: Level III	
DANC 321	Ballet III	
DANC 322	Jazz Dance III	
DANC 420	Modern Dance Technique: Level IV	
DANC 421	Ballet IV	
DANC 422	Jazz Dance IV	
DANC 424	Contemporary Partnering	
DANC 426	Modern Dance Technique: Level V	
DANC 428	Modern Dance Technique: Level VI	
THEA 254	Musical Theatre Dance I	
THEA 354	Musical Theatre Dance II	
Subtotal		36
<b>Total Hours</b>		<b>78</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs International study programs (including Edinburgh, Scotland, Fringe Festival Trip)
2. SRU Theatre Department Productions
3. Theatre internships and summer theatre employment
4. High-Impact Practice (HIP) designated classes
5. Student-faculty research
6. Student leadership development
7. Department field trips
8. Theatre Department Student Staff

9. Student Lab Productions in Sheehy Theatre
10. Guest Artist lectures, workshops, and productions

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

THEATRE - BFA (5390)

Concentration in Musical Theatre (MTHP)

This program is effective as of Fall 2022

Revised 03.03.2023

UCC 02.14.2023

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
THEA 131	Fundamentals of Acting	3
THEA 142	Wellness for the Actor (F)	3
THEA 145	Musicianship for Musical Theatre (F) <sup>1</sup>	3
THEA 146	Class Voice For Musical Theatre (F) <sup>1</sup>	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
THEA 222	Acting II (S) <sup>1</sup>	3
THEA 246	Private Musical Theatre Voice	1
THEA 392	History of Musical Theatre	3
DANC 125	Experiencing Dance: Techniques and Styles <sup>1</sup>	3
ENGL 104	Critical Reading	3
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
THEA 132	Stagecraft	3
THEA 244	Acting for Song I (F) <sup>1</sup>	3
THEA 246	Private Musical Theatre Voice	1
THEA 281	Survey of Dramatic Literature I	3
THEA 303	Acting III (F) <sup>1</sup>	3
MATH 117	Quantitative Reasoning	3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
THEA 246	Private Musical Theatre Voice	1
THEA 283	Survey of Dramatic Literature II (S)	3
THEA 304	Acting for Song II <sup>1</sup>	3

THEA 324	Stage Makeup	3
THEA 348	Musical Theatre Repertory	3
Humanities Inquiry (p. 29)		3
<b>Hours</b>		<b>16</b>

**Third Year****Fall**

THEA 246	Private Musical Theatre Voice	1
THEA 348	Musical Theatre Repertory	3
THEA 353	Voice for the Actor	3
MTP Concentration Dance Class		2
Social Science Inquiry (p. 29)		3
Thematic Thread Requirement (p. 29)		3

**Hours** **15**

**Spring**

THEA 246	Private Musical Theatre Voice	1
THEA 348	Musical Theatre Repertory	3
THEA 351	Movement for the Actor	3
MTP Concentration Dance Class		2
SCI 101	Science of Life	3
Thematic Thread Requirement (p. 29)		3

**Hours** **15**

**Fourth Year****Fall**

THEA 347	Auditioning for Musical Theatre (F) <sup>1</sup>	3
THEA 425	Professional Theatre Practice (F)	3
SCI 102	Understanding the Physical World	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Thematic Thread Requirement (p. 29)		3

**Hours** **15**

**Spring**

THEA 337	Directing	3
THEA 442	Senior Showcase	3
Creative & Aesthetic Inquiry (p. 29)		3
Thematic Thread Requirement (p. 29)		3

**Hours** **12**

**Total Hours\*\*** **121**

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

! Indicates a course which requires a grade of C or better.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major Code: 5390

Concentration Code: MTHP

Revised date: 06.01.22

## Theatre, Bachelor of Arts (BA) - Concentration in Acting

### Program Learning Outcomes

#### Acting – ACTING CORE, BA and BFA

Students in the BA Acting and BFA Acting programs will acquire the techniques necessary for the confident, skilled performance of dramatic roles. Students will:

- gain the tools to analyze and develop characters, and to create a meaningful personal connection to their roles;
- master the ability to listen and respond truthfully in the moment;
- gain the tools necessary to achieve a flexible, strong, and controlled voice and body to be used effectively as instruments for characterization.

#### ACTING – Acting Concentration, BFA

Students in the BFA Acting, Acting concentration will acquire the specific skills necessary for a career as a theatre performer. Students will:

- achieve the highest possible level of performance as an actor;
- achieve professional, entry-level competence in acting including significant technical mastery, and the capability to solve professional problems independently.

#### THEATRE DEPARTMENT, OVERALL

- **Communication:** Students will learn to communicate effectively by developing and defending informed viewpoints about theatre. Students will gain an understanding of the common elements and vocabulary of theatre and of the interaction of these elements, giving them the ability to analyze both dramatic literature and live performance perceptively and to evaluate them critically.
- **Creation/Production/Performance:** Students will gain an overview of the collaborative elements of theatre and will demonstrate an understanding of the production process. Students will explore and experience different values, perspectives, and aesthetics allowing them to problem solve, create, perform and produce theatre. Students will successfully execute job duties related to the performance of a role, crew position and/or design assignment.
- **Professional Proficiency:** Students will acquire the entrepreneurial skills necessary to assist in the development and advancement of careers in theatre. Students will learn to apply knowledge and skills to meet professional competencies in the field of theatre. Students will learn procedures and develop skills that enable them to conduct themselves in a manner accepted in the professional theatre community.
- **Historical Knowledge:** Students will acquire familiarity with theatre literature of various historical periods, cultural sources, and modes of presentation. Students will learn the essential elements of the historical development of theatre and drama. Students will relate, connect, integrate, and contextualize knowledge acquired in theatre courses.

- **Degree Program Writing Competency:** Students will gain the ability to write clearly and effectively.

Related Links

Theatre - Theatre Arts Management, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/theatre-ba-acting/>)

Theatre Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/theatre/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

Curriculum Guide

GPA Requirement

Major GPA: 2.00 or higher  
Overall GPA: 2.00 or higher

Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Other Basic Requirments	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	42

\* All undergraduate degree programs require a minimum of 120 credits.  
Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Science Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12

Subtotal	12
<b>Total Hours</b>	<b>42</b>

- <sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.
- <sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
Complete 0-9 credits		0-9
<b>Total Hours</b>		<b>0-9</b>

Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

Major/Concentration Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Core Requirements</b>		
THEA 131	Fundamentals of Acting	3

THEA 132	Stagecraft	3
THEA 281	Survey of Dramatic Literature I	3
THEA 283	Survey of Dramatic Literature II	3
THEA 337	Directing	3
THEA 425	Professional Theatre Practice	3
Subtotal		18

**Acting Concentration Core**

THEA 151	Rehearsal and Production <sup>1</sup>	1
THEA 151	Rehearsal and Production <sup>1</sup>	1
THEA 151	Rehearsal and Production <sup>1</sup>	1
THEA 222	Acting II <sup>1</sup>	3
THEA 322	Acting Technique ((may be repeated 3 times)) Repeat 3 times.	3
THEA 324	Stage Makeup <sup>1</sup>	3
THEA 328	Acting Shakespeare	3
THEA 330	Voice and Movement for the Actor <sup>1</sup>	3
THEA 394	Theories of Acting and Directing <sup>1</sup>	3
Subtotal		21

**BA Acting Electives**

Select three credits from the following: 3

THEA 159	Introduction to Theatre Arts Management	
THEA 215	Drawing/Drafting/CAD	
THEA 235	Costume Technology	
THEA 269	Playwriting	
THEA 322	Acting Technique	
THEA 329	Shakespeare Tour	
THEA 339	New Play Development	
THEA 340	International Theatre Experience	
THEA 345	Stage Management and Safety	
THEA 355	Projects in Theatre	
THEA 359	Studies in Audience Development	
THEA 450	Internship	
THEA 490	Independent Study	
THEA 498	Selected Topics (Scene Painting)	
Subtotal		3

**Total Hours** 42

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**Co-curricular and Experiential Learning**

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs International study programs (including Edinburgh, Scotland, Fringe Festival Trip)
2. SRU Theatre Department Productions
3. Theatre internships and summer theatre employment
4. High-Impact Practice (HIP) designated classes
5. Student-faculty research

6. Student leadership development
7. Department field trips
8. Theatre Department Student Staff
9. Student Lab Productions in Sheehy Theatre
10. Guest Artist lectures, workshops, and productions

**Important Curriculum Guide Notes**

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

THEATRE - BA (5 92)

Concentration in Acting (ACTI)

This program is effective as of Fall 2019.

Revised 01.18.2023

**Recommended Four-Year Plan**

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
THEA 131	Fundamentals of Acting	3
THEA 132	Stagecraft	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Rock Studies 2 Requirement (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
THEA 222	Acting II	3
ENGL 104	Critical Reading	3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
Elective		3
<b>Hours</b>		<b>15</b>

**Second Year****Fall**

THEA 281	Survey of Dramatic Literature I	3
BA Acting Elective		3
Modern Language 101		3
Rock Studies 2 Requirement (p. 29)		3
Rock Studies 2 Requirement (p. 29)		3
Declare a Thematic Thread <sup>2</sup>		

**Hours** 15

**Spring**

THEA 151	Rehearsal and Production	1
THEA 283	Survey of Dramatic Literature II	3
THEA 324	Stage Makeup	3



THEA 328	Acting Shakespeare <sup>3</sup>	3
Modern Language 102		3
Elective		3
<b>Hours</b>		<b>16</b>

**Third Year****Fall**

THEA 322	Acting Technique	3
THEA 353	Voice for the Actor	3
or THEA 351	or Movement for the Actor	
THEA 394	Theories of Acting and Directing	3
Modern Language 103		3
Thematic Thread Requirement (p. 29)		3
<b>Hours</b>		<b>15</b>

**Spring**

THEA 151	Rehearsal and Production	1
THEA 328	Acting Shakespeare <sup>3</sup>	3
THEA 337	Directing	3
Rock Studies 2 Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
Elective		3
<b>Hours</b>		<b>16</b>

**Fourth Year****Fall**

THEA 425	Professional Theatre Practice	3
Rock Studies 2 Requirement (p. 29)		3
Thematic Thread Requirement (p. 29)		3
Elective		3
Elective		3
<b>Hours</b>		<b>15</b>

**Spring**

THEA 151	Rehearsal and Production	1
Elective		3
Elective		3
Elective		3
Elective		3
<b>Hours</b>		<b>13</b>

**Total Hours\*\*** **121**

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>3</sup> Students may also select a Rock Studies 2 Thematic Thread Course.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 5 92  
Concentration: ACTI

Revised: 04.21.22

## Theatre, Bachelor of Arts (BA) - Concentration in Design & Technology

### Program Learning Outcomes

#### Design and Technology

Students in the BA Theatre, Design & Technology concentration will gain technical and design skills requisite for self-expression in at least one major area of production. Students will:

- gain the knowledge and skills sufficient to work in both collaborative and individual roles in matters of theatre interpretation.
- learn the skills necessary to make, justify, and execute original design choices and technical/construction methodologies.
- gain proficiency in at least one technical area.

#### THEATRE DEPARTMENT, OVERALL

- **Communication:** Students will learn to communicate effectively by developing and defending informed viewpoints about theatre. Students will gain an understanding of the common elements and vocabulary of theatre and of the interaction of these elements, giving them the ability to analyze both dramatic literature and live performance perceptively and to evaluate them critically.
- **Creation/Production/Performance:** Students will gain an overview of the collaborative elements of theatre and will demonstrate an understanding of the production process. Students will explore and experience different values, perspectives, and aesthetics allowing them to problem solve, create, perform and produce theatre. Students will successfully execute job duties related to the performance of a role, crew position and/or design assignment.
- **Professional Proficiency:** Students will acquire the entrepreneurial skills necessary to assist in the development and advancement of careers in theatre. Students will learn to apply knowledge and skills to meet professional competencies in the field of theatre. Students will learn procedures and develop skills that enable them to conduct themselves in a manner accepted in the professional theatre community.
- **Historical Knowledge:** Students will acquire familiarity with theatre literature of various historical periods, cultural sources, and modes of presentation. Students will learn the essential elements of the historical development of theatre and drama. Students will relate, connect, integrate, and contextualize knowledge acquired in theatre courses.

**Degree Program Writing Competency: Students will gain the ability to write clearly and effectively.**

### Related Links

Theatre - Design & Technology, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/theatre-ba-design-and-technology/>)

Theatre Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/theatre/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

# Curriculum Guide

## GPA Requirement

Major GPA: 2.00 or higher

Overall GPA: 2.00 or higher

## Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Modern Language Requirement	0-9
	Other Basic Requirements	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	42
	Electives	36

\* All undergraduate degree programs require a minimum of 120 credits.

Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

## Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Science Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
Subtotal		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

## BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
Complete 0-9 credits		0-9
<b>Total Hours</b>		<b>0-9</b>

## Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

## Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

## DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Core Requirements</b>		
THEA 131	Fundamentals of Acting <sup>1</sup>	3
THEA 132	Stagecraft <sup>1</sup>	3
THEA 281	Survey of Dramatic Literature I <sup>1</sup>	3
THEA 283	Survey of Dramatic Literature II <sup>1</sup>	3
THEA 337	Directing <sup>1</sup>	3
THEA 425	Professional Theatre Practice <sup>1</sup>	3

Subtotal	18
<b>Design &amp; Technology Concentration</b>	
THEA 151 Rehearsal and Production <sup>1</sup>	1
THEA 151 Rehearsal and Production <sup>1</sup>	1
THEA 151 Rehearsal and Production <sup>1</sup>	1
THEA 215 Drawing/Drafting/CAD <sup>1</sup>	3
THEA 235 Costume Technology <sup>1</sup>	3
THEA 333 Scene Design <sup>1</sup>	3
THEA 334 Stage Lighting <sup>1</sup>	3
THEA 335 Costume Design and History <sup>1</sup>	3
THEA 393 History of Theatre Design and Architecture <sup>1</sup>	3
Subtotal	21
<b>Design &amp; Technology Advance Electives</b>	
Select three credits from the following:	3
THEA 324 Stage Makeup <sup>1</sup>	
THEA 329 Shakespeare Tour <sup>1</sup>	
THEA 332 Advanced Stagecraft <sup>1</sup>	
THEA 339 New Play Development <sup>1</sup>	
THEA 340 International Theatre Experience <sup>1</sup>	
THEA 345 Stage Management and Safety <sup>1</sup>	
THEA 355 Projects in Theatre <sup>1</sup>	
THEA 359 Studies in Audience Development <sup>1</sup>	
THEA 394 Theories of Acting and Directing <sup>1</sup>	
THEA 450 Internship <sup>1</sup>	
THEA 490 Independent Study <sup>1</sup>	
THEA 498 Selected Topics <sup>1</sup>	
Subtotal	3
<b>Total Hours</b>	<b>42</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs International study programs (including Edinburgh, Scotland, Fringe Festival Trip)
2. SRU Theatre Department Productions
3. Theatre internships and summer theatre employment
4. High-Impact Practice (HIP) designated classes
5. Student-faculty research
6. Student leadership development
7. Department field trips
8. Theatre Department Student Staff
9. Student Lab Productions in Sheehy Theatre
10. Guest Artist lectures, workshops, and productions

THEATRE - BA (5 92)  
Concentration in Design & Technology (DEST)

This program is effective as of Fall 2019.

Revised 7-2019

UCC RISP 2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
THEA 132	Stagecraft	3
THEA 215	Drawing/Drafting/CAD	3
ENGL 102	Critical Writing	3
ESAP 101	FYRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Rock Studies 2 Requirements (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
THEA 131	Fundamentals of Acting	3
THEA 235	Costume Technology	3
ENGL 104	Critical Reading	3
Rock Studies 2 Requirements (p. 29)		3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
THEA 215	Drawing/Drafting/CAD <sup>3</sup>	3
THEA 281	Survey of Dramatic Literature I	3
Modern Language 101		3
Rock Studies 2 Requirements (p. 29)		3
Elective		3
Declare a Thematic Thread <sup>2</sup>		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
THEA 151	Rehearsal and Production	1
THEA 283	Survey of Dramatic Literature II	3
THEA 333 or THEA 334	Scene Design or Stage Lighting	3
Modern Language 102		3
Thematic Thread Requirement (p. 29)		3
Elective		3
<b>Hours</b>		<b>16</b>

**Third Year****Fall**

BA Design & Technology Elective (THEA 3XX) <sup>3</sup>	3
THEA 334                      Stage Lighting or THEA 335                      or Costume Design and History	3
Modern Language 103	3
Rock Studies 2 Requirements (p. 29)	3
Thematic Thread Requirement (p. 29)	3
<b>Hours</b>	<b>15</b>

**Spring**

BA Design & Technology Elective (THEA 3XX) <sup>3</sup>	3
THEA 151                      Rehearsal and Production	1
THEA 334                      Stage Lighting or THEA 335                      or Costume Design and History	3
THEA 337                      Directing	3
THEA 393                      History of Theatre Design and Architecture	3
Rock Studies 2 Requirements (p. 29)	3
<b>Hours</b>	<b>16</b>

**Fourth Year****Fall**

THEA 425                      Professional Theatre Practice	3
Rock Studies 2 Requirements (p. 29)	3
Thematic Thread Requirement (p. 29)	3
Elective	3
Elective	3
<b>Hours</b>	<b>15</b>

**Spring**

THEA 151                      Rehearsal and Production	1
THEA 393                      History of Theatre Design and Architecture <sup>4</sup>	3
Elective	3
Elective	3
Elective	3
<b>Hours</b>	<b>13</b>
<b>Total Hours**</b>	<b>121</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>3</sup> Students may also select a Rock Studies 2 Thematic Thread Course.

<sup>4</sup> Students may also select an Elective.

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 5390

Concentration Code: THPE

Revised date: 04.21.22

## Theatre, Bachelor of Arts (BA) - Concentration in Theatre Arts Management

### Program Learning Outcomes

#### Theatre Arts Management

Students in the BA Theatre, Theatre Arts Management concentrations will develop skills and gain knowledge related to the management, administration and support of nonprofit cultural agencies, institutions, and performing arts organizations. Students will:

- gain an understanding of Board development, institutional advancement, communications, and community-based development activities.
- gain a functional knowledge of fundraising; annual campaigns; grant writing; event planning; and individual, corporate, business, and foundation funding.
- gain an understanding of current policy issues affecting the arts, policy making processes, and the best practices for advocacy.

#### THEATRE DEPARTMENT, OVERALL

- **Communication:** Students will learn to communicate effectively by developing and defending informed viewpoints about theatre. Students will gain an understanding of the common elements and vocabulary of theatre and of the interaction of these elements, giving them the ability to analyze both dramatic literature and live performance perceptively and to evaluate them critically.
- **Creation/Production/Performance:** Students will gain an overview of the collaborative elements of theatre and will demonstrate an understanding of the production process. Students will explore and experience different values, perspectives, and aesthetics allowing them to problem solve, create, perform and produce theatre. Students will successfully execute job duties related to the performance of a role, crew position and/or design assignment.
- **Professional Proficiency:** Students will acquire the entrepreneurial skills necessary to assist in the development and advancement of careers in theatre. Students will learn to apply knowledge and skills to meet professional competencies in the field of theatre. Students will learn procedures and develop skills that enable them to conduct themselves in a manner accepted in the professional theatre community.
- **Historical Knowledge:** Students will acquire familiarity with theatre literature of various historical periods, cultural sources, and modes of presentation. Students will learn the essential elements of the historical development of theatre and drama. Students will relate, connect, integrate, and contextualize knowledge acquired in theatre courses.
- **Degree Program Writing Competency:** Students will gain the ability to write clearly and effectively.

### Related Links

Theatre - Theatre Arts Management, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/theatre-ba-theatre-arts-management/>)

Theatre Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/theatre/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.00 or higher  
Overall GPA: 2.00 or higher

### Summary\*

Code	Title	Hours
Rock Studies 2 Requirements		42
Modern Language Requirement		0-9
Other Basic Requirements		0-3
Computer Competency		0-3
Major/Concentration Requirements		42
Electives		36

\* All undergraduate degree programs require a minimum of 120 credits.  
Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Natural Science Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
Subtotal		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
Complete 0-9 credits		0-9
<b>Total Hours</b>		<b>0-9</b>

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

### Major/Concentration Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Core Requirements</b>		
THEA 131	Fundamentals of Acting	3
THEA 132	Stagecraft	3
THEA 281	Survey of Dramatic Literature I	3
THEA 283	Survey of Dramatic Literature II	3
THEA 337	Directing <sup>1</sup>	3
THEA 425	Professional Theatre Practice <sup>1</sup>	3



Subtotal	18
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**Theatre Arts Concentration**

THEA 159	Introduction to Theatre Arts Management	3
THEA 345	Stage Management and Safety <sup>1</sup>	3
THEA 359	Studies in Audience Development <sup>1</sup>	3
THEA 450	Internship	3
NLPA 220	Introduction to Nonprofit Management	3
Subtotal		15

**Theatre Arts Management Level 1 Courses**

Select 3 credits from the following:	3
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THEA 151	Rehearsal and Production
ACCT 209	Financial Accounting
COMM 231	Principles of Integrated Marketing Communication & Public Relations
COMM 235	Introduction to Digital Design
COMM 248	Interactive Multimedia 1
COMM 254	Video Production
ENGL 205	Introduction to Professional Writing
LEAD 251	Leadership Theory
NLPA 120	Civic Engagement and Community Decision-Making
NLPA 305	Financial Best Practices for Decision Makers

Subtotal	3
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**Theatre Arts Management Level 2 Courses**

Select 6 credits from the following:	6
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THEA 329	Shakespeare Tour <sup>1</sup>
THEA 339	New Play Development <sup>1</sup>
THEA 340	International Theatre Experience <sup>1</sup>
THEA 355	Projects in Theatre <sup>1</sup>
THEA 390	Experimental <sup>1</sup>
THEA 392	History of Musical Theatre <sup>1</sup>
THEA 393	History of Theatre Design and Architecture <sup>1</sup>
THEA 394	Theories of Acting and Directing <sup>1</sup>
THEA 490	Independent Study <sup>1</sup>
ACCT 322	Business Analysis and Decision Making <sup>1</sup>
COMM 307	Social Media <sup>1</sup>
COMM 318	Professional Presentation
INDP 318	Research Methods in Interdisciplinary Studies <sup>1</sup>
MGMT 351	Organizational Behavior <sup>1</sup>
MRKT 230	Principles of Marketing <sup>1</sup>
NLPA 320	Community Change and Development
NLPA 325	Social and Ethical Issues in Philanthropy and Fundraising

Subtotal	6
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**Required Stage Management Experience Before Graduation**

Stage Management Experience 1
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Stage Management Experience 2
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<b>Total Hours</b>	<b>42</b>
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<sup>1</sup> Course counts for 50% of Major requirements and Major GPA.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**Co-curricular and Experiential Learning**

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs International study programs (including Edinburgh, Scotland, Fringe Festival Trip)
2. SRU Theatre Department Productions
3. Theatre internships and summer theatre employment
4. High-Impact Practice (HIP) designated classes
5. Student-faculty research
6. Student leadership development
7. Department field trips
8. Theatre Department Student Staff
9. Student Lab Productions in Sheehy Theatre
10. Guest Artist lectures, workshops, and productions

**Important Curriculum Guide Notes**

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

THEATRE - BA (5 92)

Concentration in Theatre Arts Management (THAM)

This program is effective as of Fall 2019.

Revised 08.03.2021

UCC 02.04.20

**Recommended Four-Year Plan**

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
THEA 132	Stagecraft	3
THEA 159	Introduction to Theatre Arts Management	3
ENGL 102	Critical Writing	3
ESAP 101	FIRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Rock Studies 2 Requirements (p. 29)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
THEA 131	Fundamentals of Acting	3
THEA 283	Survey of Dramatic Literature II	3
ENGL 104	Critical Reading	3

Rock Studies 2 Requirements (p. 29)	3
Elective	3
<b>Hours</b>	<b>15</b>

**Second Year****Fall**

THEA 281 or THEA 159	Survey of Dramatic Literature I or Introduction to Theatre Arts Management	3
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Modern Language 101	3
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Rock Studies 2 Requirements (p. 29)	3
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Rock Studies 2 Requirements (p. 29)	3
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Elective	3
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Declare a Thematic Thread <sup>2</sup>	
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<b>Hours</b>	<b>15</b>
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**Spring**

THEA 283	Survey of Dramatic Literature II <sup>3</sup>	3
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THEA 345 or THEA 359	Stage Management and Safety or Studies in Audience Development	3
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NLPA 220	Introduction to Nonprofit Management	3
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Modern Language 102	3
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Thematic Thread Requirement (p. 29)	3
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<b>Hours</b>	<b>15</b>
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**Third Year****Fall**

Theatre Arts Management Level 2 Course	3
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Modern Language 103	3
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Rock Studies 2 Requirements (p. 29)	3
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Thematic Thread Requirement (p. 29)	3
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Elective	3
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<b>Hours</b>	<b>15</b>
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**Spring**

Theatre Arts Management Level 2 Course	3
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THEA 345 or THEA 359	Stage Management and Safety or Studies in Audience Development	3
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THEA 337	Directing	3
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Thematic Thread Requirement (p. 29)	3
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Elective	3
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<b>Hours</b>	<b>15</b>
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**Fourth Year****Fall**

THEA 425	Professional Theatre Practice	3
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Rock Studies 2 Requirements (p. 29)	3
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Rock Studies 2 Requirements (p. 29)	3
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Thematic Thread Requirement (p. 29)	3
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Elective	3
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<b>Hours</b>	<b>15</b>
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**Spring**

THEA 450	Internship	3
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Elective	3
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Elective	3
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Elective	3
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Elective	3
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<b>Hours</b>	<b>15</b>
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<b>Total Hours**</b>	<b>121</b>
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<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

<sup>3</sup> Students may also take Theatre Arts Management Level 1 Course

\* Students are encouraged to take ESAP 101 as a Free Elective.

**\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.**

Major Code: 5 92

Concentration: THAM

Revised date: 04.21.22

## Theatre, Bachelor of Arts (BA) - Concentration in Theatre Studies

### Program Learning Outcomes

#### Theatre Studies

Students in the BA Theatre, Theatre Studies concentration will develop a range of theatre knowledge, skills, and competencies. Students will:

- achieve intermediate level proficiency in acting, design & technology, and theatre management;
- achieve advanced level proficiency in theatre history and at least one area of focus;
- gain the knowledge and skills sufficient to work in both collaborative and individual roles in creating theatre;
- gain the tools to analyze and develop characters;
- gain a working knowledge of a chosen area of theatre design;

#### THEATRE DEPARTMENT, OVERALL

- **Communication:** Students will learn to communicate effectively by developing and defending informed viewpoints about theatre. Students will gain an understanding of the common elements and vocabulary of theatre and of the interaction of these elements, giving them the ability to analyze both dramatic literature and live performance perceptively and to evaluate them critically.
- **Creation/Production/Performance:** Students will gain an overview of the collaborative elements of theatre and will demonstrate an understanding of the production process. Students will explore and experience different values, perspectives, and aesthetics allowing them to problem solve, create, perform and produce theatre. Students will successfully execute job duties related to the performance of a role, crew position and/or design assignment.
- **Professional Proficiency:** Students will acquire the entrepreneurial skills necessary to assist in the development and advancement of careers in theatre. Students will learn to apply knowledge and skills to meet professional competencies in the field of theatre. Students will learn procedures and develop skills that enable them to

conduct themselves in a manner accepted in the professional theatre community.

- **Historical Knowledge:** Students will acquire familiarity with theatre literature of various historical periods, cultural sources, and modes of presentation. Students will learn the essential elements of the historical development of theatre and drama. Students will relate, connect, integrate, and contextualize knowledge acquired in theatre courses.

## Related Links

Theatre - Theatre Studies, BA Program Page (<https://www.sru.edu/academics/majors-and-minors/theatre-ba-theatre-studies/>)

Theatre Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/theatre/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Major GPA: 2.00 or higher  
Overall GPA: 2.00 or higher

### Summary\*

Code	Title	Hours
	Rock Studies 2 Requirements	42
	Modern Language Requirement	0-9
	Other Basic Requirments	0-3
	Computer Competency	0-3
	Major/Concentration Requirements	42
	Electives	36

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
MATH 117	Quantitative Reasoning	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Subtotal		15
<b>Integrated Inquiry</b>		
<i>Creative and Aesthetic Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Humanities Inquiry</i>		
Select 3 Credits (p. 29)		3
<i>Social Science Inquiry</i>		
Select 3 Credits (p. 29)		3

<i>Natural Science Inquiry</i>		
SCI 101	Science of Life	3
<i>Physical Science Inquiry</i>		
SCI 102	Understanding the Physical World	3
Subtotal		15
<b>Thematic Thread</b>		
Select 12 Credits (p. 29) <sup>2</sup>		12
Subtotal		12
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> One course from each category; six credits must be 300-level or above; no more than 4 credits from one subject area; specific courses required in first major, regardless of prefix of course, cannot be used to satisfy thread requirements; any course with same prefix as first major cannot be used to satisfy thread requirements, even if it is not a course in the first major.

### BA Modern Language Requirement

BA degree requires language proficiency at the 103 class level. Exemption by placement or examination is possible.

Code	Title	Hours
Complete 0-9 credits		0-9
<b>Total Hours</b>		<b>0-9</b>

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

## Major/Concentration Requirements

- 21 major credits must be taken at SRU or PASSHE
- 21 major credits must be taken at the 300 level or above

Code	Title	Hours
<b>Core Requirements</b>		
THEA 131	Fundamentals of Acting <sup>1</sup>	3
THEA 132	Stagecraft <sup>1</sup>	3
THEA 281	Survey of Dramatic Literature I <sup>1</sup>	3
THEA 283	Survey of Dramatic Literature II <sup>1</sup>	3
THEA 337	Directing <sup>1</sup>	3
THEA 425	Professional Theatre Practice <sup>1</sup>	3
Subtotal		18
<b>Theatre Studies - Core</b>		
THEA 151	Rehearsal and Production <sup>1</sup>	1
THEA 151	Rehearsal and Production <sup>1</sup>	1
THEA 151	Rehearsal and Production <sup>1</sup>	1
THEA 215	Drawing/Drafting/CAD	3
Select one of the following:		3
THEA 159	Introduction to Theatre Arts Management	
THEA 222	Acting II	
THEA 269	Playwriting	
THEA 235	Costume Technology	
Subtotal		9
<b>Theatre Studies - Management Coursework</b>		
Select one of the following:		3
THEA 345	Stage Management and Safety <sup>1</sup>	
THEA 359	Studies in Audience Development <sup>1</sup>	
Subtotal		3
<b>Theatre Studies - Design Coursework</b>		
Select one of the following:		3
THEA 333	Scene Design <sup>1</sup>	
THEA 334	Stage Lighting <sup>1</sup>	
THEA 335	Costume Design and History <sup>1</sup>	
Subtotal		3
<b>Theatre Studies - Advanced Coursework</b>		
Select nine credits from the following:		9
THEA 324	Stage Makeup <sup>1</sup>	
THEA 328	Acting Shakespeare <sup>1</sup>	
THEA 329	Shakespeare Tour <sup>1</sup>	
THEA 330	Voice and Movement for the Actor <sup>1</sup>	
THEA 332	Advanced Stagecraft <sup>1</sup>	
THEA 333	Scene Design <sup>1</sup>	
or THEA 334	Stage Lighting	
or THEA 335	Costume Design and History	
THEA 339	New Play Development <sup>1</sup>	
THEA 340	International Theatre Experience <sup>1</sup>	
THEA 342	IPA/Dialects <sup>1</sup>	
THEA 345	Stage Management and Safety <sup>1</sup>	
THEA 355	Projects in Theatre <sup>1</sup>	
THEA 359	Studies in Audience Development <sup>1</sup>	
THEA 392	History of Musical Theatre <sup>1</sup>	

THEA 393	History of Theatre Design and Architecture <sup>1</sup>	
THEA 394	Theories of Acting and Directing <sup>1</sup>	
THEA 450	Internship <sup>1</sup>	
THEA 490	Independent Study <sup>1</sup>	
THEA 498	Selected Topics <sup>1</sup>	
Subtotal		9
<b>Total Hours</b>		<b>42</b>

<sup>1</sup> Course counts for 50% of Major requirements and Major GPA.

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

## Co-curricular and Experiential Learning

Students are encouraged to explore additional curricular and co-curricular opportunities. There is a strong correlation between long-term student success and participation in the following types of programs and activities:

1. International study programs International study programs (including Edinburgh, Scotland, Fringe Festival Trip)
2. SRU Theatre Department Productions
3. Theatre internships and summer theatre employment
4. High-Impact Practice (HIP) designated classes
5. Student-faculty research
6. Student leadership development
7. Department field trips
8. Theatre Department Student Staff
9. Student Lab Productions in Sheehy Theatre
10. Guest Artist lectures, workshops, and productions

THEATRE - BA (5 92)

Concentration in Theatre Studies (THST)

This program is effective as of Fall 2019.

Revised 7-2019

UCC RISP 2019

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

## Recommended Four-Year Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
THEA 132	Stagecraft <sup>2</sup>	3
THEA 215	Drawing/Drafting/CAD <sup>2</sup>	3
ENGL 102	Critical Writing	3

ESAP 101	FIRST Seminar *	1
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
Rock Studies Requirement		3
<b>Hours</b>		<b>16</b>

**Spring**

THEA 131	Fundamentals of Acting <sup>2</sup>	3
THEA XXX	Theatre Studies Core Course	3
ENGL 104	Critical Reading	3
Rock Studies Requirement		3
Elective		3

**Hours** **15**

**Second Year****Fall**

THEA 281	Survey of Dramatic Literature I	3
MODL 101	Modern Language 101	3
Rock Studies Requirement		3
Rock Studies Requirement		3
Elective		3
Declare a Thematic Thread <sup>3</sup>		

**Hours** **15**

**Spring**

THEA 151	Rehearsal and Production	1
THEA 283	Survey of Dramatic Literature II	3
THEA XXX	Theatre Studies Management Course	3
MODL 102	Modern Language 102	3
Thematic Thread Requirement (p. 29)		3
Elective		3

**Hours** **16**

**Third Year****Fall**

THEA 33X	Theatre Studies Design Course	3
THEA XXX	Theatre Studies Advance Course	3
MODL 103	Modern Language 103	3
Rock Studies Requirement		3
Thematic Thread Requirement (p. 29)		3

**Hours** **15**

**Spring**

THEA 151	Rehearsal and Production	1
THEA XXX	Theatre Studies Advanced Course	3
THEA 337	Directing	3
Rock Studies Requirement		3
Thematic Thread Requirement (p. 29)		3
Elective		3

**Hours** **16**

**Fourth Year****Fall**

THEA 425	Professional Theatre Practice	3
THEA XXX	Theatre Studies Advanced Course	3
Rock Studies Requirement		3
Thematic Thread Requirement (p. 29)		3
Elective		3

**Hours** **15**

**Spring**

THEA 151	Rehearsal and Production	1
Elective		3
Elective		3
Elective		3
Elective		3

**Hours** **13**

**Total Hours\*\*** **121**

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

<sup>2</sup> Students should complete THEA 131, THEA 132, and THEA 215 as early as possible in the program. Students are highly encouraged to complete a minor or second major course of studies (i.e., Education, Art, Communication, History, etc.)

<sup>3</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year.

\* Students are encouraged to take ESAP 101 as a Free Elective.

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

MAJOR: BA Theatre (5 92)

Concentration: Theatre Studies (THST)

Revised 04.21.22

## Theatre, Minor

The Theatre Minor is designed to offer students a variety of paths through the curriculum. Through specific choices at the intermediate level and advanced levels, students can effectively complete a Theatre Minor in Acting, Musical Theatre, Design & Technology, Theatre Arts Management, or Theatre Studies. Department faculty can work directly with students to choose the path best suited for their educational goals.

For more information, contact the Department Chair.

To access Minor Requirements, please view the Curriculum Guide tab.

## Related Links

Theatre, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/theater-minor/>)

Theatre Department Page (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/theatre/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

## Curriculum Guide

### GPA Requirement

Minor GPA: 2.0 or higher

### Minor Requirements

- Students must complete at least 6 credit hours in their minor from SRU



- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.

Code	Title	Hours
<b>Core Requirements</b>		
THEA 131	Fundamentals of Acting	3
THEA 132	Stagecraft	3
THEA 151	Rehearsal and Production	1
THEA 151	Rehearsal and Production	1
THEA 281	Survey of Dramatic Literature I	3
or THEA 283	Survey of Dramatic Literature II	
<b>Intermediate Level Requirements</b>		
Select one of the following:		3
THEA 130	Art of Theatre	
THEA 159	Introduction to Theatre Arts Management	
THEA 215	Drawing/Drafting/CAD	
THEA 222	Acting II	
THEA 235	Costume Technology	
THEA 269	Playwriting	
THEA 281	Survey of Dramatic Literature I	
THEA 283	Survey of Dramatic Literature II	
<b>Advanced Level Requirements</b>		
Select six credits of the following:		6
THEA 322	Acting Technique (may be repeated 3 times)	
THEA 324	Stage Makeup	
THEA 328	Acting Shakespeare	
THEA 329	Shakespeare Tour	
THEA 332	Advanced Stagecraft	
THEA 333	Scene Design	
THEA 334	Stage Lighting	
THEA 335	Costume Design and History	
THEA 337	Directing	
THEA 339	New Play Development	
THEA 340	International Theatre Experience	
THEA 342	IPA/Dialects	
THEA 345	Stage Management and Safety	
THEA 355	Projects in Theatre	
THEA 359	Studies in Audience Development	
THEA 392	History of Musical Theatre	
THEA 393	History of Theatre Design and Architecture	
THEA 394	Theories of Acting and Directing	
THEA 425	Professional Theatre Practice	
THEA 450	Internship	
THEA 490	Independent Study	
THEA 498	Selected Topics	
<b>Total Hours</b>		<b>20</b>

\* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

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PASSHE - Pennsylvania State System of Higher Education Institutions

MINOR IN THEATRE (93A)

This program is effective as of Fall 2018.

Revised 07.08.20

UCC 03.05.20

## Departments

### College of Business

- Accounting, Economics, and Finance (p. 30)
- Government Contracting Assistance Center (GCAC) (p. 57)
- Information Systems and Technology Management (p. 57)
- Management and Marketing (p. 66)
- Military Science (Army ROTC) (p. 96)
- Safety Management (p. 99)
- Sport Management, Hospitality and Tourism (p. 106)
- Strategic Communication and Media (p. 121)

### College of Education

- Counseling & Development (p. 153)
- Elementary Education/Early Childhood Education (p. 155)
- Physical and Health Education (p. 172)
- Secondary Education/Foundations of Education (p. 211)
- Special Education (p. 243)

### College of Engineering and Science

- Biology (p. 263)
- Chemistry (p. 361)
- Computer Science (p. 404)
- Geography, Geology, and the Environment (p. 434)
- Mathematics and Statistics (p. 477)
- Physics and Engineering (p. 497)

### College of Health Professions

- Exercise Science and Athletic Training (p. 552)
- Healthcare Administration and Management (p. 601)
- Nursing (p. 657)
- Psychology (p. 663)
- Public Health (p. 712)
- Recreational Therapy (p. 743)
- Social Work (p. 764)

## College of Liberal Arts

- Art (p. 771)
- Criminology and Criminal Justice (p. 836)
- Dance (p. 850)
- Gender Studies (p. 870)
- History (p. 872)
- Homeland/Corporate Security and Leadership (p. 887)
- Languages, Literatures, Cultures, and Writing (p. 912)
- Library (p. 951)
- Music (p. 952)
- Nonprofit Management, Empowerment and Diversity Studies (p. 1012)
- Philosophy (p. 1047)
- Political Science (p. 1058)
- Theatre (p. 1079)

## Faculty

Slippery Rock University Faculty (p. 1107)

Slippery Rock University Faculty/Administrative Emeriti (p. 1131)

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M.S., Central Washington University  
B.S., Minnesota State University

**Timothi Williams**

Instructor  
Music  
M.M., Penn State University  
B.M., West Liberty University

**Brian Wisneski**

Instructor  
Homeland/Corp Sec & Leadership  
Ed.D., Creighton University  
M.S., Boston University  
B.A., Spring Arbor University

**Hye Ryung Won**

Assistant Professor  
Elementary Ed/Early Childhood  
Ph.D., Florida State University  
M.Ed., The University of Texas at Austin  
M.Ed., Chung-Ang University  
B.Ed., Korea National Open University

**X**

**Liang Xu**

Associate Professor  
Management & Marketing  
Ph.D., University of Missouri  
M.B.A., University of Missouri  
E.E., Nanjing Institute of Technology

**Y**

**Junko Yamamoto**

Associate Professor  
Secondary Ed/Foundations Ed  
Ed.D., Duquesne University  
M.P.A., University of Pittsburgh  
B.A., University of Japan

**Eunice Yeboah**

Assistant Professor  
Social Work  
Ph.D., Southern Illinois University  
M.S.W., Southern Illinois University  
B.A., University of Ghana

**Stephanie Young**

Assistant Professor  
School of Physical Therapy  
D.P.T., Slippery Rock University  
B.S., Slippery Rock University

**Z**

**Linda Zane**

Professor  
Elementary Ed/Early Childhood  
Ed.D., Duquesne University  
M.A., University of Pittsburgh  
B.S., University of Pittsburgh

**Alessia Zanin Yost**



Assistant Professor

Library

M.L.I.S., San Jose State University

M.A., University of California Davis

B.A., California State University

#### **Donald Zapien**

Professor

Chemistry

Ph.D., University of California at Santa Barbara

B.S., University of Santa Clara

#### **Matthew Zarit**

Professor

Nonprofit Mgt, Empower&Div Stu

Ph.D., University of Pittsburgh

M.A., University of Pittsburgh

M.S., Carnegie Mellon University

B.A., Syracuse University

#### **Jun Zhang**

Associate Professor

Physics and Engineering

Ph.D., Old Dominion University

M.S., Nanchang University

B.S., Nanchang University

#### **Hongbo Zhou**

Associate Professor

Computer Science

Ph.D., Michigan State University

M.S., Xi'an Jiaotong University (China)

B.S., Xi'an Jiaotong University (China)

#### **Traci Zillifro**

Professor

Physical and Health Education

Ph.D., Pennsylvania State University

M.A., Edinboro State University

B.S., Kent State University

#### **Susan Zirpoli**

Assistant Professor

Chemistry

Ph.D., Pennsylvania State University

B.A., Franklin and Marshall College

## **Faculty/Administrative Emeriti**

### **A**

#### **Richard Altenbaugh**

Secondary Ed/Foundations Ed

#### **Henry Anna**

Government & Public Affairs

#### **Patricia Archibald**

Biology

#### **Robert Arnhold**

Physical and Health Education

### **B**

#### **Deborah Baker**

University Advancement

#### **Eliott Baker**

Acad. Records & Registration

#### **Stephen Banjak**

Physical and Health Education

#### **Nancy Barta-Smith**

English

#### **Francis Bires**

McKeever Center

#### **Paul Black**

Secondary Ed/Foundations Ed

#### **William Boggs**

English

#### **Bruce Boliver**

Hospitality & Tourism Manage

#### **Robert Bost**

Special Education

#### **Kathleen Boykin**

Modern Languages & Cultures

#### **Roberta Braden**

Physical and Health Education

#### **Bernice Brown**

Elementary Ed/Early Childhood

#### **Beverly Buchert**

Elementary Ed/Early Childhood

#### **Edwin Buchert**

Geography, Geology & Environm

#### **Robert Buck**

Mathematics & Statistics

#### **John Burtch**

Elementary Ed/Early Childhood

#### **Kent Bushnell**

Geography, Geology & Environm

### **C**

#### **William Chapman**

Geography, Geology & Environm

#### **Gerald Chesin**

Curriculum & Instruction

#### **Jerry Chmielewski**

Biology

#### **Larry Cobb**

Government & Public Affairs

#### **Joan Condrary**

English

**Michael Conlon**  
Computer Science

**Cornelius Cosgrove**  
English

**Robert Crafton**  
English

**John Craig**  
History

**J Crayne**  
Art

**David Culp**  
School of Business

**D**  
**Thomas Daddesio**  
Modern Languages & Cultures

**David Dailey**  
Computer Science

**Maryann Dailey**  
Nursing

**Michael Detlefsen**  
Mathematics & Statistics

**Cynthia Dillon**  
Academic Affairs

**Diana Dreyer**  
English

**Sherry Dupont**  
Elementary Ed/Early Childhood

**Daniel Dziubek**  
Parks and Recreation

**E**  
**William Elliott**  
Administrative Affairs

**F**  
**Hans Fellner**  
Physics

**Susan Ferrandiz**  
Library

**Richard Findler**  
Philosophy

**George Force**  
Government & Public Affairs

**Bernard Freydborg**  
Philosophy

**G**  
**Thomas Gaither**  
Biology

**Stephen Glinsky**  
Modern Languages & Cultures

**Anita Gorman**  
English

**Elise Grabner**  
Mathematics & Statistics

**Gary Grabner**  
Mathematics & Statistics

**Colleen Gray**  
Music

**Anne Griffiths**  
College of Health & Human Services

**H**  
**Jean Hamilton**  
Physical and Health Education

**Susan Hannam**  
College of Health, Environment & Science

**Kenneth Harris**  
Theatre

**Joseph Harry**  
Strategic Comm and Media

**James Hathaway**  
Geography, Geology & Environm

**Stephen Hawk**  
Music

**Francis Hensler**  
Information Technology

**Susan Herman**  
Exercise & Rehabilitative Sci

**William Herman**  
Physical and Health Education

**Jay Hertzog**  
College of Education

**John Hicks**  
Elementary Ed/Early Childhood

**George Highland**  
Physics

**Robert Hinds**  
Geography, Geology & Environm

**William Hotchkiss**  
Physical and Health Education

**James Hughes**

Geography, Geology & Environm

**Frank Hulick**

Info Systems & Technology Mgt

**Deborah Hutchins**

Parks,Conserv&RecreationTherpy

**I**

**Michael Ignelzi**

Counseling & Development

**J**

**Patricia Johnson**

Secondary Ed/Foundations Ed

**Stanley Johnson**

Parks and Recreation

**Diana Jones**

Nursing

**Sharadchandra Joshi**

Computer Science

**K**

**Thomas Kandl**

Elementary Ed/Early Childhood

**Brian Kearney**

Physics

**Bradley Keith**

Physical and Health Education

**Donald Kelly**

History

**Stanley Kendziorski**

Allied Health

**Ahmad Khalili**

Nonprofit Mgt, Empower&Div Stu

**Maribeth Knaub**

Music

**Theodore Kneupper**

Philosophy

**Akiko Kotani**

Art

**Parameswar Krishnakumar**

Management & Marketing

**L**

**James Laux**

Strategic Comm and Media

**Jack Layne**

Biology

**Jeffrey Lehman**

Secondary Ed/Foundations Ed

**Henry Lenz**

Secondary Ed/Foundations Ed

**Ruth Leo**

Nursing

**Ann Liedel-Rice**

Elementary Ed/Early Childhood

**William Lindgren**

Mathematics & Statistics

**Paul Lueken**

Athletics

**M**

**Francis Manfredi**

Special Education

**Srinivasa Mani**

Professional Study&Inter Prgms

**Joseph Marks**

Developmental Programs

**Clair McClure**

Mathematics & Statistics

**Mary McKay**

Elementary Ed/Early Childhood

**Joanne McKeag**

Physical and Health Education

**Barbara McNeal**

English

**Donald Megnin**

Political Science

**James Mennell**

History

**George Mihalik**

Safety Management

**Carl Miller**

Information Technology

**Pamela Miller**

Elementary Ed/Early Childhood

**Catherine Morsink**

College of Education

**Richard Myers**

Special Education

**Karin Myers-Tillotson**

Secondary Ed/Foundations Ed

**N**

**Ramona Nelson**

Nursing

**John Nichols**  
History

**Abbas Noorbakhsh**  
School of Business

**Joseph Normand**  
Strategic Comm and Media

## O

**Chester O'Bannon**  
Music

**William Oman**  
Philosophy

**Monica Ondrusko**  
Special Education

**Bruce Orvis**  
Management & Marketing

## P

**Nicholas Papanikolaou**  
Chemistry

**Leona Parascenzo**  
Nursing

**Gary Pechar**  
Exercise & Rehabilitative Sci

**Rachela Permenter**  
English

**William Polk**  
Elementary Ed/Early Childhood

**Charles Porter**  
Counseling & Educational Psychology

**Fred Powell**  
Physical and Health Education

**Carolyn Prorok**  
Geography, Geology & Environm

## R

**Charles Rice**  
Elementary Ed/Early Childhood

**Paula Rieder**  
History

**Joseph Riggs**  
Strategic Comm and Media

**Melinda Ristvey**  
Modern Languages & Cultures

**Paul Rizza**  
Sociology, Anthropology & Social Work

**Larry Rotge**  
History

**Bruce Russell**  
College of Business

## S

**Lucy Sack**  
Dance

**Robert Sattler**  
Special Education

**W Sayre**  
Chemistry

**Claire Schmieler**  
Health Services

**Jane Scott Cleary**  
Library

**Ben Shaevitz**  
Physics and Engineering

**Charles Shaw**  
History

**Charles Shultz**  
Geography, Geology & Environm

**William Sigmund**  
Biology

**Esther Skirboll**  
Sociology, Anthropology and Social Work

**Robert Smith**  
President

**Nanette Solomon**  
Music

**Donald Stauffer**  
Special Education

**Stacey Steele**  
Music

**Terry Steele**  
Music

**Carolyn Steglich**  
Biology

**Thomas Stewart**  
Strategic Comm and Media

**Michael Stowe**  
Sociology, Anthropology & Social Work

**Donald Strano**  
Counseling & Development

**K James Strickland**  
English

**Kathleen Strickland**  
College of Education

**Constantine Stroumbakis**  
Secondary Ed/Foundations Ed

**Wendy Stuhldreher**  
Public Health & Social Work

**Valerie Swarts**  
Strategic Comm and Media

## T

**Frederick Tannery**  
School of Business

**David Taylor**  
Chemistry

**Rhoda Taylor**  
Biology

**William Taylor**  
Sociology, Anthropology & Social Work

**Mary Ann Thurkettle**  
Nursing

**Charles Tichy**  
Modern Languages & Cultures

**Frank Treccase**  
Modern Languages & Cultures

**Eva Tsuquiashi-Daddesio**  
College of Liberal Arts

**Genevieve Tvrdik**  
Biology

## V

**Jesus Valencia**  
Accounting, Economics & Finance

**David Valentine**  
School of Business

**Mary Vetere**  
Elementary Ed/Early Childhood

**Paulette Viola**  
Parks and Recreation

## W

**Raymond Wallace**  
Theatre

**Frances Walsh**  
Elementary Ed/Early Childhood

**Amy Walters**  
Strategic Comm and Media

**Robert Watson**

Student Affairs

**Gene Wilhelm**  
Sociology, Anthropology & Social Work

**A Williams**  
Elementary Ed/Early Childhood

**William Williams**  
Academic Affairs

## Z

**Mark Zeltner**  
Strategic Comm and Media

**Patricia Zimmerman**  
Physical and Health Education

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## Accounting (ACCT)

### ACCT 101 - Taxes in America

In America, our income is taxed when we earn it and when we spend it. Our property is taxed when we own it and sometimes even when we give it away! We pay taxes to our local, state, and federal governments. Learn where you tax dollars go, how they are used, and how you influence tax legislation. Evaluate how our taxes affect diverse populations in American society.

Credits: 3

Term(s) Typically Offered: Offered Summer & Winter Terms

### ACCT 139 - Foundations of Academic Discovery

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

### ACCT 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ACCT 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**ACCT 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ACCT 209 - Financial Accounting**

A study of accounting concepts and principles that govern the recording, processing, and reporting of accounting information. The significance of the financial statements and the analysis of accounting information for investors, creditors, and other external users in the decision making process is emphasized.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Cultural Literacy & Community Building, Institutions & Human Innovations, Transfer Thread Completion Course

**ACCT 210 - Managerial Accounting**

A study of accounting concepts and procedures used for cost analysis, cost allocation, planning, and reporting accounting information with an internal perspective. The significance of accounting information and the financial statements for management's decision-making process is emphasized.

Prerequisite: ACCT 209<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

**ACCT 230 - Accounting Information Systems**

Designing effective accounting information systems to generate reliable accounting information is the focus of the course. The significance of accounting information, transaction cycles, systems controls, document flowcharts, and accounting software are emphasized.

Prerequisites: ACCT 209<sup>C</sup> and (CPSC 210<sup>D</sup> or MIS 210<sup>D</sup>)

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Every Term

**ACCT 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ACCT 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**ACCT 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ACCT 308 - Federal Individual Income Tax**

Study of the federal income tax system, individual returns, rates, income exclusions and inclusions, gains and losses, deductions, alternate tax methods, and withholding of taxes. Prerequisite: Advanced business standing.

Prerequisite: ACCT 209<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 310 - Cost Accounting**

A study of control concepts and costing methods including systems for management control, inventory valuation, cost-volume-profit analysis, standard variance analysis, budgeting, decision models, product cost accumulation, and quantitative methods in cost analysis.

Prerequisites: ACCT 209<sup>C</sup> and (ECON 219<sup>D</sup> or MGMT 219<sup>D</sup>)

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 311 - Federal Corporate and Transfer Taxes**

Corporate, partnership, estate and trust taxation are covered along with topics such as depletion, net operating losses, and installment and deferred payment sale.

Prerequisite: ACCT 308<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 313 - Intermediate Accounting I**

An examination of accounting principles and the study of the foundations of accounting theory and practice. Emphasis is placed on the conceptual framework of accounting and the development of generally accepted accounting principles including the FASB Codification, SEC, IASB, and other standards setting bodies; time value of money concepts, accounting for stockholders' equity and the presentation of the balance sheet and income statement. Ethical issues and concerns are stressed throughout the course.

Prerequisites: ACCT 209<sup>C</sup> and ACCT 230<sup>C</sup> and ECON 202<sup>D</sup> and (ECON 219<sup>D</sup> or MGMT 219<sup>D</sup>)

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 314 - Intermediate Accounting II**

A continuation of ACCT 313 covering the detailed examination and application of generally accepted accounting procedures in accounting for stockholders' equity: contributed capital and retained earnings; revenue and expense determination, recognition, and measurement with particular emphasis on pensions, leases, and deferred taxes. Ethical issues and concerns are stressed throughout the course.

Prerequisite: ACCT 313<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 315 - Intermediate Accounting III**

A continuation of ACCT 313 covering the detailed examination and application of generally accepted accounting principles in accounting for stockholders' equity issues: revenue recognition, pensions, leases, deferred taxes, share based compensation, EPS, accounting changes and error corrections; and the cash flow statement. Ethical issues and concerns are stressed throughout the course.

Prerequisite: ACCT 314<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 320 - Forensic Accounting**

Forensic Accounting as an accounting field of study has surged with the high profile corporate misappropriation of assets/financial statement manipulation and fraud situations over the last 20 years. White collar fraud and the resulting increased legislation has heightened awareness of fraud and increased the need for accountants with forensic accounting skills. Certifications such as the Certified Fraud Examiner (CFE) now increasingly sought after by practitioners and students. ACCT 320 is dual listed as ACCT 620.

Prerequisites: ACCT 209<sup>C</sup> and ACCT 313<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 322 - Business Analysis and Decision Making**

This course acquaints students with the process used to construct and understand the financial reports of organizations. An important objective is to understand the decisions that must be made in the financial reporting process and to develop the ability to evaluate and use accounting data. Included in the content are a study of accounting concepts and procedures used for financial statement analysis, cost analysis, cost allocation, planning and reporting accounting information. The significance of accounting information and the financial statements for management's decision-making process is emphasized.

Prerequisite: ACCT 209<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 324 - Cost Accounting II**

This course is a continuation of Cost Accounting, ACCT 310. This course covers breakeven analysis, activity based costing, inventory management, differential analysis, transfer pricing, product pricing, capital planning, cost centers, the balanced scorecard, and decision making under uncertainty.

Prerequisite: ACCT 310<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 340 - Legal Environment of Business**

A study of the various processes available to resolve business disputes and an exploration of complex legal relationships that affect business, including contracts, business formations, employment, and torts and consumer law.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 341 - Legal Environment of Business II**

An analysis of complex transactions including mergers and acquisitions, antitrust law, financial instruments, intellectual property, bankruptcy, environmental, estate and international law.

Prerequisite: ACCT 340<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 345 - Volunteer Income Tax Assistance (VITA)**

The focus of this class is service learning. The students will be afforded the opportunity to receive IRS certification as a tax preparer while making a difference in their community. Students will prepare annual federal and state income tax return for low income individuals that qualify for the Volunteer Income Tax Assistance (VITA) Program. Students must pass an IRS certification exam and receive training on the Tax software. All Individual tax returns prepared as part of this class will be detailed reviewed prior to filing the tax. Students will develop and enhance a number of soft skills such as problem solving, teamwork, critical thinking, and leadership, each of which is valuable to entry-level accounting and business professionals.

Prerequisite: ACCT 308 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Enrollment limited to students with a semester level of Junior 2, Post Baccalaureate, Senior 1 or Senior 2.

Enrollment limited to students in the College of Business college.

Enrollment limited to students with department of Accounting, Economics & Finance.

**ACCT 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 400 - Legal Environment of Healthcare**

Legal Environment of Healthcare acquaints future healthcare managers with legal issues relating to government, patients, healthcare employees, and contractors. This course surveys a wide variety of legal concepts, terms, and common-sense tips for entry-level healthcare organization employees.

Prerequisites: HCAM 230<sup>C</sup> and HCAM 275<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even, Offered Spring Terms, Offered Winter Terms Odd

**ACCT 411 - Auditing Theory and Practice**

Objective examination of financial statements with emphasis on internal control, review and evaluation, sampling theory and application, and procedural testing.

Prerequisite: ACCT 315<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 412 - Accounting Seminar**

Analysis of current accounting theory and application in practice. Additional focus on ethics, written and oral communication, organization skills, professionalism, and current topics.

Prerequisite: ACCT 314<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 413 - Advanced Accounting**

In this course, advanced accounting concepts and procedures affecting partnerships, governmental entities, not-for-profit organizations, estates, and trusts are presented. Diverse global accounting issues, diversity in application of generally accepted accounting standards (GAAP), and the harmonization of GAAP in the development of international financial reporting standards (IRFS) as it applies to business combinations, consolidations, and transactions between international entities are highlighted.

Prerequisite: ACCT 315<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 419 - Auditing Systems**

Continuation of ACCT 411 with emphasis on computerized accounting systems and auditing procedures.

Prerequisite: ACCT 411<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 423 - Advanced Accounting II**

This course is a continuation of Advanced Accounting, ACCT 413. Covers various topics, with emphasis on not-for-profit accounting (government, education, hospitals, and volunteer organizations), fiduciary accounting (estates, trusts, and insolvent companies), and advanced financial statement presentations (interim reporting, foreign currency, and segment reporting). Related pronouncements from the Financial Accounting Standards Board and the Governmental Accounting Standards Board will also be introduced.

Prerequisite: ACCT 413<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

**ACCT 429 - Accounting Data Analytics**

Analysis of data for accounting and finance applications. Focus on accounting data analysis concepts and techniques for decisions making and the use of large data sets involving accounting information. Development of analysis and problem solving skills using current software tools available to accounting professionals. ACCT 429 is dual listed as ACCT 629.

Prerequisite: ACCT 230<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

**ACCT 450 - Internship**

Supervised placement in selected public and private agencies at appropriate institutions. Prerequisites: Application and permission of the instructor. It is recommended that this be taken as a 3 credit internship.

Credits: 1-12

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 451 - Employment Law**

This course covers the law as it applies to all aspects of the employer - employee relation, including union activity, discrimination, selection, testing and employment contracts.

Prerequisites: MGMT 351<sup>D</sup> or MGMT 250<sup>D</sup> or MGMT 251<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 490 - Independent Study**

In-depth reading and/or research in an area of particular interest to the student, done with the guidance of a faculty member. Prerequisites: 12 credits of accounting courses, application, and permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ACCT 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## American Sign Language (ASL)

**ASL 101 - American Sign Language and Culture**

This course is the first of a three-course series and focuses on American Sign Language and Culture. This course introduces basic aspects of the grammar and proper use of hand configuration and facial expressions in sign language communication.

Credits: 3

## Art (ART)

**ART 100 - 2-D Design**

An introductory studio course examining the underlying structure of basic design in two-dimensional art. Students will be involved in the actual production of two-dimensional design solutions. The history of design is explored, as well as the various techniques employed by artists to express personal visions, communicate ideas or examine and interpret the human experience.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment is limited to students with a program in Art Graphic Design(Comm Major), Art, Art or Art With Certification (K-12).

**ART 101 - 3-D Design**

An introductory studio course examining the underlying structure of basic design in three-dimensional art. Students will be involved in the actual production of three-dimensional design solutions. The history of design is explored, as well as the various techniques employed by artists to express personal visions, communicate ideas or examine and interpret the human experience.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment is limited to students with a major in Art, Art or Art With Certification (K-12).

**ART 105 - Basic Studio Drawing**

This course will provide students with introductory level drawing knowledge and skills, emphasizing fine art approaches. Drawing will be explored through production, critique, history and aesthetics. Students will be provided with the fundamental technical, historical and conceptual information necessary to produce fine art drawings and maintain a portfolio. The elements and principles of design will be incorporated through the use of various drawing materials and techniques. Emphasis will be placed on the hands-on exploration of formal, technical and conceptual relationships. Students will develop a sensitive response to subtleties in drawing as well as to the whole. Critical thinking will be addressed with each project, allowing students to improve their ability to analyze visual works of art. Through creative studio practice, students discover relationships relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course



**ART 106 - Basic Studio Painting**

This course will provide students with introductory level painting knowledge and skills, emphasizing fine art approaches. Painting will be explored through production, critique, history and aesthetics in order to achieve individual artistic goals. Students will be provided with the fundamental technical, historical and conceptual information necessary to produce fine art paintings and develop a portfolio. The elements and principles of design will be incorporated through the use of various painting materials and techniques. Emphasis will be placed on the hands-on exploration of formal, technical and conceptual relationships. Students will develop a sensitive response to subtleties in paintings as well as to the whole. Critical thinking will be addressed with each project, allowing students to improve their ability to analyze visual works of art. Through creative studio practice, students discover relationships relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 107 - Basic Studio Photography**

This course will provide students with introductory level photographic knowledge and skills, emphasizing fine art approaches. Photography will be explored through production, critique, history and aesthetics in order to achieve individual artistic goals. Students will be provided with the fundamental technical, historical and conceptual information necessary to produce fine art prints and maintain a portfolio. The elements and principles of design will be incorporated into the study of photography, with focus on formal, technical and conceptual relationships. Students will gain knowledge of various genres of photography, styles, tips and techniques. Critical thinking will be addressed with each project, allowing students to improve their ability to visually analyze artwork. Through creative studio practice, students discover relationships relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 108 - Basic Studio Printmaking**

This course will provide students with introductory level printmaking knowledge and skills. Printmaking will be explored through production, critique, history and aesthetics. Students will be provided with the fundamental, technical, historical and conceptual information necessary to produce fine art prints and editions of prints. The elements and principles of design will be incorporated through the use of various printmaking material and techniques. Emphasis will be placed on the hands-on exploration of formal, technical and conceptual relationships. Critical thinking will be addressed with each project, allowing students to improve their ability to analyze visual works of art. Through creative studio practice, students discover relationships relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 109 - Basic Studio Metalsmithing**

This course will provide students with introductory Metalsmithing knowledge and skills, emphasizing fine art approaches while utilizing a variety of materials, predominantly metal. Metalsmithing will be explored through production, critique, history and aesthetics in order to achieve individual artistic goals and expression. Students will be provided with the fundamental technical, historical and conceptual information necessary to produce fine art forms and develop a portfolio. Students gain an understanding of various techniques, styles and approaches to metalsmithing. Critical thinking will be addressed with each project, allowing students to improve their ability to analyze visual works of art. Through creative studio practice, students discover relationships relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 110 - Basic Studio Sculpture**

This course will provide students with introductory Sculpture knowledge and skills, emphasizing fine art approaches while utilizing a variety of materials. Sculpture will be explored through production, critique, history and aesthetics in order to achieve individual artistic goals and expression. Students will be provided with the fundamental technical, historical and conceptual information necessary to produce fine art forms and develop a portfolio. Students gain an understanding of various techniques, styles and approaches to contemporary sculpture. Critical thinking will be addressed with each project, allowing students to improve their ability to analyze visual works of art. Through creative studio practice, students discover relationship relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 111 - Basic Studio Fiber Art**

This course will provide students with introductory level Fiber Art knowledge and skills. Fiber Art will be explored through production, critique, history and aesthetics. Students will be provided with the fundamental technical, historical and conceptual information necessary to produce fine art forms and develop a portfolio. Through two-and three-dimensional projects, students will have an opportunity to creatively explore a variety of traditional and non-traditional flexible materials, techniques and concepts while developing a portfolio. Emphasis will be placed upon the ability to investigate the unique qualities and characteristics of materials and the development of an original response to an assignment. Critical thinking will be addressed with each project, allowing students to improve their ability to analyze visual works of art. Through creative studio practice, students discover relationships relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 112 - Basic Studio Ceramics**

This course will provide students with introductory ceramics knowledge and skills, emphasizing fine art approaches while utilizing a variety of materials. Ceramics will be explored through production, critique, history and aesthetics in order to achieve individual artistic goals, and expression. Students will be provided with the fundamental technical, historical and conceptual information necessary to produce fine art forms and develop a portfolio. Students gain an understanding of various techniques, styles and approaches to contemporary ceramics. Emphasis will be placed upon the ability to investigate the unique qualities and characteristics of materials and the development of an original response to an assignment. Critical thinking will be addressed with each project, allowing students to improve their ability to analyze visual works of art. Through creative studio practice, students discover relationships relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 113 - Basic Studio Graphic Design**

Students will explore Graphic Design with a beginning level of production, critique, history and aesthetics. This course is intended to develop the student's skill level and personal aesthetic. Creative responses to assignments will include the application of visual language skills to communicate ideas, meaning and information. Coursework will include traditional, digital and mixed media. It will also focus on studies in perception, visual organization, the graphic design process and ideation, with investigations into experimental and expressive aspects of graphic design. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 114 - Basic Studio Digital Media**

This course will provide students with introductory level Digital Media knowledge and skills, emphasizing fine art approaches that utilize the computer in addition to other various technologies to produce works of art. Digital Media will be explored through production, critique, history and aesthetics in order to achieve individual artistic goals. Students will be provided with the fundamental technical, historical and conceptual information necessary to produce digitally-based art. Technical ability and development, conceptual development, and media experimentation will be stressed. Critical thinking will be addressed with each project, allowing students to improve their ability to analyze visual works of art. Through creative studio practice, students discover relationships relevant to their role as an artist and work to develop the following emphasized artistic traits: perceptual openness, flexibility/adaptability, the courage to take a risk, the ability to analyze, and self-confidence.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 115 - Visual Literacy**

A cornerstone course involving the study of visual forms of communication with an emphasis on image-based media (newspaper, magazine, film, television, photography, informational graphics, interactive multimedia, digital games and web-based technologies). Topics include visual interpretation, visual manipulation, visual conventions, the role of visual media in cultural processes and aesthetic appreciation.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Thematic Thread(s): Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 121 - Introduction to Visual Arts**

This course provides an introduction to visual arts for high school students enrolled in SRU's Summer Arts Academy.

Credits: 1

Term(s) Typically Offered: Offered as Needed

**ART 130 - Visual Art Inquiry**

Art 130 Visual Art Inquiry: This course presents an approachable yet broad, sweeping overview of the visual arts while also providing an introduction to modes of inquiry shared by all the creative and aesthetic disciplines. Students will explore and analyze influential works of art through the lens of materials, styles, and processes as a way to gain an understanding of the arts as a method of communication and expression. From ancient to contemporary art history we examine artwork in the context of social, religious, historical, cultural influences in which they existed, and will draw connections between artistic movements and how they are common to all fine and performing arts. Through building a context for understanding, art is made meaningful to the student's experience. Studying and experiencing the arts, including dance, music, theatre, and the visual arts, develops creative and aesthetic abilities. The arts introduce students not only to artists and their creations, but also to history, cultures, values, technique, imagination, creativity, and issues relevant to society. Students will gain an understanding of the creative process and how to analyze and interpret message and meaning in works of art. While the arts can bring us pleasure, they can also serve to enlighten and illuminate critical issues, lead to personal discoveries, and foster innovation in all fields. Students will learn to think critically about the arts, develop an appreciation for artistic creations, and by viewing live performances and exhibitions, become engaged audience members. Arts inquiry courses use and develop the analytic and interpretive modes of inquiry needed to understand and explore both tangible and abstract artistic works and the cultures in which they exist. In arts inquiry courses, students confront a variety of cultural and artistic expressions in order to gain an understanding of the human condition, and ultimately express their relationship to artistic work, meaning, and the creative process. Attendance at arts events will be required during this course and may require a fee.

Credits: 3

Thematic Thread(s): Transfer Thread Completion Course

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**ART 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**ART 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ART 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**ART 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ART 200 - Activities and Fundamentals**

A course providing for the study of child development through creative activities. It includes theory, experimentation with two and three-dimensional processes appropriate to the elementary classroom, methods of motivation, evaluation and classroom management.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**ART 205 - Intermediate Studio Drawing**

The student will explore Drawing with an increased level of production, critique, history and aesthetics. This course will provide the student with a moderate level of fine art studio drawing. Students will explore how to work with the fine art medium of mark-making through process and production, including art history and discussion. Students will review fundamental technical and conceptual information necessary to further the creation of fine art pieces. Students will develop individual applications of drawing with an increased level to critically analyze both individual and peer artwork. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problem; ability to synthesize. Repeatable: consult individual curriculum guide.

Prerequisites: ART 100<sup>D</sup> or ART 101<sup>D</sup> or ART 105<sup>D</sup> or ART 106<sup>D</sup> or ART 107<sup>D</sup> or ART 108<sup>D</sup> or ART 109<sup>D</sup> or ART 110<sup>D</sup> or ART 111<sup>D</sup> or ART 112<sup>D</sup> or ART 114<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 206 - Intermediate Studio Painting**

The student will explore Painting with an increased level of production, critique, history and aesthetics. This course will provide the student with a moderate level of fine art studio painting. Students will explore how to work with the fine art medium of paint through process and production, including art history and discussion. Students will review fundamental technical and conceptual information necessary to further the creation of fine art pieces. Students will develop individual applications of painting with an increased level to critically analyze both individual and peer artwork. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize. Repeatable: consult individual curriculum guide.

Prerequisites: ART 100<sup>D</sup> or ART 101<sup>D</sup> or ART 105<sup>D</sup> or ART 106<sup>D</sup> or ART 107<sup>D</sup> or ART 108<sup>D</sup> or ART 109<sup>D</sup> or ART 110<sup>D</sup> or ART 111<sup>D</sup> or ART 112<sup>D</sup> or ART 114<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 207 - Intermediate Studio Photography**

The student will explore Photography with an increased level of production, critique, history and aesthetics. Student will continue to develop photographic knowledge and skills, emphasizing fine art approaches. Students will review fundamental technical and conceptual information necessary to further the creation of fine art photographs. Students will continue to receive technical, historical and conceptual information to help advance their portfolios. Primary emphasis will be placed on technical refinement alongside development of creative problem-solving skills. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize. Repeatable: consult individual curriculum guide.

Prerequisites: ART 100<sup>D</sup> or ART 101<sup>D</sup> or ART 105<sup>D</sup> or ART 106<sup>D</sup> or ART 107<sup>D</sup> or ART 108<sup>D</sup> or ART 109<sup>D</sup> or ART 110<sup>D</sup> or ART 111<sup>D</sup> or ART 112<sup>D</sup> or ART 114<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 208 - Intermediate Studio Printmaking**

The student will explore Printmaking with an increased level of production, critique, history and aesthetics. This course will provide students with opportunities to explore and develop techniques and concepts of Printmaking. Emphasis will be on the manual procedures of printing black and white as well as color prints. Continued development of technical ability, conceptual development and media experimentation will be stressed. Primary emphasis will be placed on the development of creative problem-solving skills. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize. Repeatable: consult individual curriculum guide.

Prerequisites: ART 100<sup>D</sup> or ART 101<sup>D</sup> or ART 105<sup>D</sup> or ART 106<sup>D</sup> or ART 107<sup>D</sup> or ART 108<sup>D</sup> or ART 109<sup>D</sup> or ART 110<sup>D</sup> or ART 111<sup>D</sup> or ART 112<sup>D</sup> or ART 114<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 209 - Intermediate Studio Metalsmithing**

The student will explore Metalsmithing with an increased level of production, critique, history and aesthetics. This course is intended to increase skill level while continuing to develop the student's personal aesthetic. Students will demonstrate a variety of metalsmithing techniques while understanding Metalsmithing's technical and historical contexts. Students are expected to be self-motivated in terms of idea generation and execution. Students will explore avenues to make their work more personal by combining metalsmithing technical skills with form and concept. Primary emphasis will be placed on technical refinement alongside development of creative problem-solving skills. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize. Repeatable: consult individual curriculum guide.

Prerequisites: ART 100<sup>D</sup> or ART 101<sup>D</sup> or ART 105<sup>D</sup> or ART 106<sup>D</sup> or ART 107<sup>D</sup> or ART 108<sup>D</sup> or ART 109<sup>D</sup> or ART 110<sup>D</sup> or ART 111<sup>D</sup> or ART 112<sup>D</sup> or ART 114<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 210 - Intermediate Studio Sculpture**

The student will explore Sculpture with an increased level of production, critique, history and aesthetics. This course is intended to increase skill level while continuing to develop the student's personal aesthetic. Students will demonstrate a variety of sculptural techniques while understanding Sculpture's contemporary and historical contexts. Students are expected to be self-motivated in terms of idea generation and execution. Students will explore avenues to make their work more personal by combining technical skills with form and concept. Primary emphasis will be placed on technical refinement alongside development of creative problem-solving skills. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize. Repeatable: consult individual curriculum guide

Prerequisites: ART 100<sup>D</sup> or ART 101<sup>D</sup> or ART 105<sup>D</sup> or ART 106<sup>D</sup> or ART 107<sup>D</sup> or ART 108<sup>D</sup> or ART 109<sup>D</sup> or ART 110<sup>D</sup> or ART 111<sup>D</sup> or ART 112<sup>D</sup> or ART 114<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 211 - Intermediate Studio Fiber Art**

The student will continue to explore Fiber Art with an increased level of production, critique, history and aesthetics. This course will provide students with opportunities to explore both traditional and non-traditional flexible materials, techniques and concepts within contemporary Fiber Art. Through two- and three-dimensional projects, students will continue to develop their skills, artistic perception and conceptual thinking. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize. Repeatable: consult individual curriculum guide.

Prerequisites: ART 100<sup>D</sup> or ART 101<sup>D</sup> or ART 105<sup>D</sup> or ART 106<sup>D</sup> or ART 107<sup>D</sup> or ART 108<sup>D</sup> or ART 109<sup>D</sup> or ART 110<sup>D</sup> or ART 111<sup>D</sup> or ART 112<sup>D</sup> or ART 114<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course



**ART 212 - Intermediate Studio Ceramics**

The student will explore Ceramics with an increased level of production, critique, history and aesthetics. Students will explore avenues to make their work more personal by combining Ceramic technical skills with form and concept. Primary emphasis will be placed on technical refinement of wheel-throwing and hand-building construction alongside development of creative problem-solving skills. Various methods of glazing and firing are addressed as they relate to student work on specific projects. Technical refinement alongside development of creative problem-solving skills will be emphasized also. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize. Repeatable: consult individual curriculum guide.

Prerequisites: ART 100<sup>D</sup> or ART 101<sup>D</sup> or ART 105<sup>D</sup> or ART 106<sup>D</sup> or ART 107<sup>D</sup> or ART 108<sup>D</sup> or ART 109<sup>D</sup> or ART 110<sup>D</sup> or ART 111<sup>D</sup> or ART 112<sup>D</sup> or ART 114<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 213 - Intermediate Studio Graphic Design**

The student will explore Graphic Design with an increased level of production, critique, history and aesthetics. This course is intended to increase skill level while continuing to develop the student's personal aesthetic. Creative responses to assignments will include the application of visual language skills to communicate ideas, meaning and information. Coursework will include traditional, digital and mixed media. Coursework will focus on studies in perception, visual organization, the graphic design process and ideation, with investigations into experimental and expressive aspects of graphic design. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize. Repeatable: consult individual curriculum guide.

Prerequisites: ART 100<sup>D</sup> or ART 101<sup>D</sup> or ART 105<sup>D</sup> or ART 106<sup>D</sup> or ART 107<sup>D</sup> or ART 108<sup>D</sup> or ART 109<sup>D</sup> or ART 110<sup>D</sup> or ART 111<sup>D</sup> or ART 112<sup>D</sup> or ART 114<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 214 - Intermediate Studio Digital Media**

The student will explore Digital media with an increased level of production, critique, history and aesthetics in order to achieve individual artistic goals. Emphasis will be placed upon production and process. Students will review fundamental technical and conceptual information necessary to further the creation of fine art pieces while maintaining a portfolio. New digital techniques will be explored as they become necessary to articulate and advance individual creative needs. Primary emphasis will be placed on technical refinement alongside development of creative problem-solving skills. Through creative studio practice, students should develop the following emphasized artistic traits: ability to resist premature closure; sensitivity to problems; ability to synthesize. Repeatable: consult individual guide.

Prerequisites: ART 100<sup>D</sup> or ART 101<sup>D</sup> or ART 105<sup>D</sup> or ART 106<sup>D</sup> or ART 107<sup>D</sup> or ART 108<sup>D</sup> or ART 109<sup>D</sup> or ART 110<sup>D</sup> or ART 111<sup>D</sup> or ART 112<sup>D</sup> or ART 114<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**ART 225 - Overview of Western Art**

A sweeping survey intended to acquaint the student with the stylistic development and chronology of the western tradition in the arts. Covers the period and styles prevalent in the Western World from the Beginnings of art to the modern era.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

**ART 226 - Overview of World Art**

A survey course intended to acquaint the student with the stylistic developments and chronology of the visual arts in Asia, Africa, India and South America. Special emphasis will be given to the expression of cultural, religious and aesthetic purposes of art works created outside the western tradition.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

**ART 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ART 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**ART 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ART 300 - Art Seminar**

A seminar for advanced art studio majors, designed to sharpen the students' critical and evaluation skills.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ART PORTFOLIO APPROVED attribute.

**ART 305 - Advanced Studio Drawing**

This course will investigate an advanced level of drawing production, critique, history and aesthetics, and will focus on the achievement of individual artistic goals through the exploration of concept-based assignments. A wide range of traditional and non-traditional materials and processes will be utilized to further the skillful creation of artwork, and new drawing techniques will be explored to aid in the articulation of individual creative ideas. Emphasis will be placed upon making judgments and developing fluency through heightened production and an expanded exploration of process. Additionally, students will strengthen their ability to critically analyze artwork, and will maintain a drawing portfolio. CAPP Prerequisites: Must take 1 of the following: ART 205, ART 206, ART 207, ART 208, ART 209, ART 210, ART 211, ART 212, ART 213 or ART 214.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 306 - Advanced Studio Painting**

This course will investigate an advanced level of painting production, critique, history and aesthetics, and will focus on the achievement of individual artistic goals through the exploration of concept-based assignments. A wide range of traditional and non-traditional materials and processes will be utilized to further the skillful creation of artwork, and new drawing techniques will be explored to aid in the articulation of individual creative ideas. Emphasis will be placed upon making judgments and developing fluency through heightened production and an expanded exploration of process. Additionally, students will strengthen their ability to critically analyze artwork, and will maintain a painting portfolio. CAPP Prerequisites: Must take 1 of the following: ART 205, ART 206, ART 207, ART 208, ART 209, ART 210, ART 211, ART 212, ART 213 or ART 214.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 307 - Advanced Studio Photography**

This course will investigate an advanced level of photographic production, critique, history and aesthetics. Students will continue to investigate genres of photography, and new photographic techniques will be explored to aid in the articulation of individual artistic goals. Emphasis will be placed upon strengthening portfolios through heightened production and an expanded exploration of process. Students will continue to strengthen their ability to critically analyze artwork. Through creative studio practice, students should develop the following emphasized artistic traits: independence in making judgments and fluency in ideas and materials. Repeatable: consult individual curriculum guide.

Prerequisites: ART 205<sup>D</sup> or ART 206<sup>D</sup> or ART 207<sup>D</sup> or ART 208<sup>D</sup> or ART 209<sup>D</sup> or ART 210<sup>D</sup> or ART 211<sup>D</sup> or ART 212<sup>D</sup> or ART 213<sup>D</sup> or ART 214<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 308 - Advanced Studio Printmaking**

This course will provide students with opportunities to explore techniques and concepts of printmaking at an advanced level. Through projects students will have an opportunity to develop their skills, artistic perception and conceptual thinking. The course will focus on students gaining independence in making judgments, and developing fluency in their art process. Through creative studio practice, students should be able to develop the following emphasized artistic traits: independence in making judgments and fluency in ideas and materials.

Prerequisites: ART 205<sup>D</sup> or ART 206<sup>D</sup> or ART 207<sup>D</sup> or ART 208<sup>D</sup> or ART 209<sup>D</sup> or ART 210<sup>D</sup> or ART 211<sup>D</sup> or ART 212<sup>D</sup> or ART 213<sup>D</sup> or ART 214<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 309 - Advanced Studio Metalsmithing**

This course will investigate an advanced level of metalsmithing production, critique, history and aesthetics. Students will continue to investigate genres of metalsmithing, and new metalsmithing techniques will be explored to aid in the articulation of individual artistic goals. Emphasis will be placed upon strengthening portfolios through heightened production and an expanded exploration of process. Students will continue to strengthen their ability to critically analyze artwork. Through creative studio practice, students should develop the following emphasized artistic traits: independence in making judgments and fluency in ideas and materials. Repeatable: consult individual curriculum guide.

Prerequisites: ART 205<sup>D</sup> or ART 206<sup>D</sup> or ART 207<sup>D</sup> or ART 208<sup>D</sup> or ART 209<sup>D</sup> or ART 210<sup>D</sup> or ART 211<sup>D</sup> or ART 212<sup>D</sup> or ART 213<sup>D</sup> or ART 214<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 310 - Advanced Studio Sculpture**

This course will investigate an advanced level of Sculpture production, critique, history and aesthetics. Students will continue to investigate genres of Sculpture, and new Sculpture techniques will be explored to aid in the articulation of individual artistic goals. Emphasis will be placed upon strengthening portfolios through heightened production and an expanded exploration of process. Students will continue to strengthen their ability to critically analyze artwork. Through creative studio practice, students should develop the following emphasized artistic traits: independence in making judgments and fluency in ideas and materials. Repeatable: consult individual curriculum guide.

Prerequisites: ART 205<sup>D</sup> or ART 206<sup>D</sup> or ART 207<sup>D</sup> or ART 208<sup>D</sup> or ART 209<sup>D</sup> or ART 210<sup>D</sup> or ART 211<sup>D</sup> or ART 212<sup>D</sup> or ART 213<sup>D</sup> or ART 214<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 311 - Advanced Studio Fiber Art**

This course will provide students with opportunities to explore traditional and non-traditional flexible materials, techniques and concepts of contemporary Fiber Art at an advanced level. Through two- and three-dimensional projects students will have an opportunity to develop their skills, artistic perception and conceptual thinking. The course will focus on students gaining independence in making judgments, and developing fluency in their art process. Through creative studio practice, students should be able to develop the following emphasized artistic traits: independence in making judgments and fluency in ideas and materials. Repeatable: consult individual curriculum guide.

Prerequisites: ART 205<sup>D</sup> or ART 206<sup>D</sup> or ART 207<sup>D</sup> or ART 208<sup>D</sup> or ART 209<sup>D</sup> or ART 210<sup>D</sup> or ART 211<sup>D</sup> or ART 212<sup>D</sup> or ART 213<sup>D</sup> or ART 214<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 312 - Advanced Studio Ceramics**

This course will investigate an advanced level of ceramics production, critique, history and aesthetics, and will focus on the achievement of individual artistic goals through the exploration of functional and concept-based assignments. A wide range of traditional and non-traditional materials and processes will be utilized to further the skillful creation of artwork, and new ceramic techniques will be explored to aid in the articulation of individual creative endeavors. Emphasis will be placed on fluency through heightened production and an expanded exploration of process. Students will strengthen their ability to critically analyze artwork, and will maintain a ceramics portfolio. Through creative studio practice, students should develop the following emphasized artistic traits: independence in making judgments and fluency in ideas and materials. Repeatable: consult individual curriculum guide.

Prerequisites: ART 205<sup>D</sup> or ART 206<sup>D</sup> or ART 207<sup>D</sup> or ART 208<sup>D</sup> or ART 209<sup>D</sup> or ART 210<sup>D</sup> or ART 211<sup>D</sup> or ART 212<sup>D</sup> or ART 213<sup>D</sup> or ART 214<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 313 - Advanced Studio Graphic Design**

This course will investigate an advanced level of graphic design production, critique, history and aesthetics, and will focus on the achievement of individual artistic goals through the exploration of concept-based assignments. A wide range of traditional and non-traditional materials and processes will be utilized to further the skillful creation of artwork, and new graphic design techniques will be through heightened production and an expanded exploration of process. Students will strengthen their ability to critically analyze artwork, and will maintain a graphic design portfolio. Through creative studio practice, students would develop the following emphasized artistic traits: independence in making judgments and fluency in ideas and materials. Repeatable: consult individual curriculum guide.

Prerequisites: ART 205<sup>D</sup> or ART 206<sup>D</sup> or ART 207<sup>D</sup> or ART 208<sup>D</sup> or ART 209<sup>D</sup> or ART 210<sup>D</sup> or ART 211<sup>D</sup> or ART 212<sup>D</sup> or ART 213<sup>D</sup> or ART 214<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 314 - Advanced Studio Digital Media**

This course will investigate an advanced level of digital media production, critique, history and aesthetics, and will focus on the achievement of individual artistic goals through the exploration of concept-based assignments. A wide range of traditional and non-traditional materials and processes will be utilized to further the skillful creation of artwork, and new digital media techniques will be explored to aid in the articulation of individual creative endeavors. Emphasis will be placed on fluency through heightened production and an expanded exploration of process. Students will strengthen their ability to critically analyze artwork, and will maintain a digital media portfolio. Through creative studio practice, students should develop the following emphasized artistic traits: independence in making judgments and fluency in ideas and materials. Repeatable: consult individual curriculum guide. CAPP Prerequisites: Must take 1 of the following: ART 205, ART 206, ART 207, ART 208, ART 209, ART 210, ART 211, ART 212, ART 213 or ART 214.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 315 - Master Studio**

A course in which master artists and craftsmen speak to the history and development of their discipline. They will also demonstrate techniques and critique student work. May be repeated for a maximum of 9 credits.

Credits: 1

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 317 - Elementary Art Methods and Materials**

This course provides an exploration of age appropriate instructional methods, materials and techniques for comprehensive elementary art programs. Art education theory, developmental stages of artistic growth, the importance of the arts in the curriculum, issues of inclusion, differentiation of instruction and assessment, PA Standards for the Arts, and strategies to enhance interdisciplinary connections will be included. Opportunity is provided to engage in, and analyze, actual instruction and artistic products. Field placement required.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 325 - North American Art History**

Explores the history of the visual arts produced on the North American continent and covers the artistic expressions of Native Americans and the development of European colonial art to the Second World War. Can be repeated for up to 6 credits.

Prerequisite: ART 225<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 335 - The Renaissance Tradition**

Explores the historical development of the visual arts in Europe from the mid-14th century to the mid-17th century. Can be repeated for up to 6 credits.

Prerequisite: ART 225<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 345 - Foundations of Modern Art**

The development of modern concepts and approaches in the visual arts from the late 18th century up to and including Impressionism in the late 19th century. Can be repeated for up to 6 credits.

Prerequisite: ART 225<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 355 - Early Modern Art**

Explores the history of the visual arts during the late nineteenth century culminating with the surrealist movement before the Second World War. Can be repeated for up to 6 credits.

Prerequisite: ART 225<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 365 - Art Since 1945**

Explores the development of the visual arts in the late twentieth century. It will cover the social, cultural and stylistic movements from Abstract Expressionism to contemporary art. Can be repeated for up to 6 credits.

Prerequisite: ART 225<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 405 - Senior Studio Drawing**

The student will demonstrate intrinsic motivation and a high degree of self-awareness in a personal investigation of drawing production, critique, history and aesthetics, and will demonstrate self-directed behavior relevant to professionalism and artistry. Coursework will require an understanding of self that extends to an integral commitment in the production of drawing. The quality and caliber of drawing work produced in this course will define the student as a drawing artist. CAPP Prerequisites: Must take 1 of the following: ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313 or ART 314

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 406 - Senior Studio Painting**

The student will demonstrate intrinsic motivation and a high degree of self-awareness in a personal investigation of painting production, critique, history and aesthetics, and will demonstrate self-directed behavior relevant to professionalism and artistry. Coursework will require an understanding of self that extends to an integral commitment in the production of painting. The quality and caliber of drawing work produced in this course will define the student as a painter. CAPP Prerequisites: Must take 1 of the following: ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313 or ART 314

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 407 - Senior Studio Photography**

This course will encourage students to explore personal investigations of photographic production, critique, history and aesthetics. Students will demonstrate self-directed behavior relevant to professionalism and artistry. The course requires students to build a cohesive body of work with an integral emphasis on the photographic image, allowing students to supplement their technical and conceptual aptitude while developing a greater understanding of their placement in a larger historical context. Coursework will emphasize a high level of quantity, caliber and ambition to further articulate a professional portfolio. Through creative studio practice, students should develop a high degree of self-awareness and intrinsic motivation. Repeatable: consult individual curriculum guide. CAPP Prerequisites: Must take 1 of the following: ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313 or ART 314.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 408 - Senior Studio Printmaking**

The quality and caliber of prints produced in this course will define the student as an artist. Emphasis will be placed on artistic perception, developing concepts and individual artistic vision. Students will focus on a personal investigation of printmaking, technique, critique, history and aesthetics, and will demonstrate self-directed behavior relevant to professionalism and artistry. Through creative studio practice, students should develop a high degree of self-awareness and intrinsic motivation. CAPP Prerequisites: Must take 1 of the following: ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313 or ART 314.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 409 - Senior Studio Metalsmithing**

This course will encourage students to explore a personal investigation of metalsmithing production, critique, history and aesthetics. Students will demonstrate self-directed behavior relevant to professionalism and artistry. Coursework will require an understanding of self that extends to an integral commitment in the production of a variety of work that is representative of the student's individual aesthetic. The quality and caliber of work produced in this course will define the student as a metalsmith. Through creative studio practice, students should develop a high degree of self awareness and intrinsic motivation. Repeatable: consult individual curriculum guide. CAPP Prerequisites: Must take 1 of the following: ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313 or ART 314.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 410 - Senior Studio Sculpture**

This course will encourage students to explore a personal investigation of Sculpture through production, critique, history and aesthetics. Students will demonstrate self-directed behavior relevant to professionalism and artistry. Coursework will require an understanding of self that extends to an integral commitment in the production of a variety of work that is representative of the student's individual aesthetic. The quality and caliber of work produced in this course will define the student as a sculptor. Through creative studio practice, students should develop a high degree of self-awareness and intrinsic motivation. Repeatable: consult individual curriculum guide. CAPP Prerequisites: Must take 1 of the following: ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313 or ART 314.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**ART 411 - Senior Studio Fiber Art**

The quality and caliber of fiber artwork produced in this course will define the student as an artist. Emphasis will be placed on artistic perception, developing concepts and individual artistic vision. Students will focus on a personal investigation of fiber art materials, technique, critique, history and aesthetics, and will demonstrate self-directed behavior relevant to professionalism and artistry. Through creative studio practice, students should develop a high degree of self-awareness and intrinsic motivation. Repeatable: consult individual curriculum guide.

Prerequisites: ART 305<sup>D</sup> or ART 306<sup>D</sup> or ART 307<sup>D</sup> or ART 308<sup>D</sup> or ART 309<sup>D</sup> or ART 310<sup>D</sup> or ART 311<sup>D</sup> or ART 312<sup>D</sup> or ART 313<sup>D</sup> or ART 314<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 412 - Senior Studio Ceramics**

This course will encourage students to explore a personal investigation of ceramics production, critique, history and aesthetics. Students will demonstrate self-directed behavior relevant to professionalism and artistry. Coursework will require an understanding of self that extends to an integral commitment in the production of ceramics. The quality and caliber of ceramic work produced in this course will define the student as a ceramic artist. Through creative studio practice, students should develop a high degree of self-awareness and intrinsic motivation. Repeatable: consult individual curriculum guide. CAPP Prerequisites: Must take 1 of the following: ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313 or ART 314.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 413 - Senior Studio Graphic Design**

This course will encourage students to explore a personal investigation of graphic design production, critique, history and aesthetics. Students will demonstrate self-directed behavior relevant to professionalism and artistry. Coursework will require an understanding of self that extends to an integral commitment in the production of graphic design. The quality and caliber of graphic design work produced in this course will define the student as a graphic artist. Through creative studio practice, students should develop a high degree of self-awareness and intrinsic motivation. Repeatable: consult individual curriculum guide.

Prerequisites: ART 305<sup>D</sup> or ART 306<sup>D</sup> or ART 307<sup>D</sup> or ART 308<sup>D</sup> or ART 309<sup>D</sup> or ART 310<sup>D</sup> or ART 311<sup>D</sup> or ART 312<sup>D</sup> or ART 313<sup>D</sup> or ART 314<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 414 - Senior Studio Digital Media**

This course will encourage students to explore a personal investigation of digital media production, critique, history and aesthetics. Students will demonstrate self-directed behavior relevant to professionalism and artistry. Coursework will require an understanding of self that extends to an integral commitment in the production of digital media. The quality and caliber of digital media work produced in this course will define the student as a digital artist. Through creative studio practice, students should develop a high degree of self-awareness and intrinsic motivation. Repeatable: consult individual curriculum guide. CAPP Prerequisites: Must take 1 of the following: ART 305, ART 306, ART 307, ART 308, ART 309, ART 310, ART 311, ART 312, ART 313 or ART 314.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 420 - Art History Seminar**

A seminar for students qualified to do independent study and research in art history. Topics selected through consultation with the instructor. Can be repeated for up to 6 credits.

Prerequisite: ART 225<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 425 - Senior Project Drawing**

A capstone course emphasizing the articulation of ideas and presentation. This course provides independent study in drawing, culminating in a public exhibition demonstrating the student's artistic direction. The student will focus on concepts relevant to individual interests, and will determine the content and form based on past study of drawing production, critique, history and aesthetics. The student is responsible for all necessary components of a professional exhibition of their drawing work. Permission of the instructor.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 426 - Senior Project Painting**

This course provides independent study in painting, culminating in a public exhibition demonstrating the student's artistic direction. The student will focus on concepts relevant to individual interests, and will determine the content and form based on past study of painting production, critique, history and aesthetics. The student is responsible for all necessary components of a professional exhibition of their graphic design work. Permission of the instructor.

Prerequisites: ART 306<sup>D</sup> or ART 406<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 427 - Senior Project Photography**

A capstone course emphasizing the articulation of ideas and presentation. Senior students will engage in an individually proposed project, culminating in a public exhibition with supporting materials that demonstrate the student's artistic expertise. The student will focus on an individual direction in Photography, the content and form of which will be determined by past photographic investigations, critique, history and aesthetics while working closely with the Photography professor. The student is responsible for all components of their projects while displaying a high level of self-awareness, intrinsic motivation, and professionalism. By permission of instructor.

Prerequisites: ART 307<sup>D</sup> or ART 407<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 428 - Senior Project Printmaking**

In this capstone course the senior student will engage in an individually proposed project, culminating in a public exhibition demonstrating the student's artistic direction. The student will focus on concepts relevant to individual interests in printmaking, and will determine the content and form based on past study of printmaking production creation, critique, history and aesthetics, and under the supervision of the Fiber Art Professor. The student is responsible for all necessary components of a professional exhibition of their work. By permission of the instructor.

Prerequisites: ART 308<sup>D</sup> or ART 408<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 429 - Senior Project Metalsmithing**

A capstone course emphasizing the articulation of ideas and presentation. Senior students will engage in an individually proposed project, culminating in a public exhibition with supporting materials that demonstrate the student's artistic expertise. The student will focus on an individual direction in Metalsmithing, the content and form of which will be determined by past studio investigations, critique, history and aesthetics while working closely with the Metalsmithing professor. The student is responsible for all components of their projects while displaying a high level of self-awareness, intrinsic motivation, and professionalism. By permission of instructor.

Prerequisites: ART 309<sup>D</sup> or ART 409<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 430 - Senior Project Sculpture**

A capstone course emphasizing the articulation of ideas and presentation. Senior students will engage in an individually proposed project, culminating in a public exhibition with supporting materials that demonstrate the student's artistic expertise. The student will focus on an individual direction in Sculpture, the content and form of which will be determined by past studio investigations, critique, history and aesthetics while working closely with the Sculpture professor. The student is responsible for all components of their projects while displaying a high level of self-awareness, intrinsic motivation, and professionalism. By permission of instructor.

Prerequisites: ART 310<sup>D</sup> or ART 410<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 431 - Senior Project Fiber Art**

In this capstone course the senior student will engage in an individually proposed project, culminating in a public exhibition demonstrating the student's artistic direction. The student will focus on concepts relevant to individual interests in fiber art, and will determine the content and form based on past study of fiber art production creation, critique, history and aesthetics, and under the supervision of the Fiber Art Professor. The student is responsible for all necessary components of a professional exhibition of their work. By permission of the instructor.

Prerequisites: ART 311<sup>D</sup> or ART 411<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 432 - Senior Project Ceramics**

A capstone course emphasizing the articulation of ideas and presentation. Senior students will engage in an individually proposed project, culminating in a public exhibition with supporting materials that demonstrate the student's artistic expertise. The student will focus on an individual direction in ceramics, the content and form of which will be determined by past ceramics investigations, critique, history and aesthetics while working closely with the ceramics professor. The student is responsible for all components of their projects while displaying a high level of self-awareness, intrinsic motivation, and professionalism. By permission of instructor.

Prerequisites: ART 312<sup>D</sup> or ART 412<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 433 - Senior Project Graphic Design**

A capstone course emphasizing the articulation of ideas and presentation. Senior students will engage in an individually proposed project, culminating in a public exhibition with supporting materials that demonstrate the student's artistic expertise. The student will focus on an individual direction in Graphic Design, the content and form of which will be determined by past Graphic Design professor. The student is responsible for all components of their projects while displaying a high level of self-awareness, intrinsic motivation, and professionalism. By permission of instructor.

Prerequisites: ART 313<sup>D</sup> or ART 413<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 434 - Senior Project Digital Media**

A capstone course emphasizing the articulation of ideas and presentation. Senior students will engage in an individually proposed project, culminating in a public exhibition with supporting materials that demonstrate the student's artistic expertise. The student will focus on an individual direction in Digital Media, the content and form of which will be determined by past digital media investigations, critique, history and aesthetics while working closely with the Digital Media professor. The student is responsible for all components of their projects while displaying a high level of self-awareness, intrinsic motivation, and professionalism. By permission of instructor.

Prerequisites: ART 314<sup>D</sup> or ART 414<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 440 - Art Education Methods**

This class meets once a week to discuss field placement experiences and teaching skills and fulfills part of the Pennsylvania Department of Education (PDE) Stage 3 Pre-Student Teaching Practical requirements. Activities include discussions on research, development and preparation of art lesson plans, strategies for success in an inclusive art classroom, and analysis and assessment of teaching experiences.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms Odd

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

Enrollment is limited to students with a program in Art.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 450 - Internship**

Professional experiences geared to student vocational goals. Working in galleries, museums or graphic design studios, working with professional artists in their studios and other job-related experiences.

Corequisite(s): ART 451

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 451 - Art Education Methods Internship**

This internship covers some of the Stage 3 Pre-Student Teaching field experiences: 90 hours of documented placement under the supervision and mentorship of certified K-12 Art Teacher(s). At least one experience during Stage 3 must include students with special needs in inclusive settings. Activities include assisting small or large groups of children, lesson development/preparation, and lesson plans. Observation and evaluation of teaching by the professor will occur near the end of the semester.

Corequisite(s): ART 440

Credits: 2

Term(s) Typically Offered: Offered Fall Terms Odd

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

Enrollment is limited to students with a program in Art.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 475 - Extended Studio Drawing**

This course provides individualized creative work in drawing that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 476 - Extended Studio Painting**

This course provides individualized creative work in Painting that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 477 - Extended Studio Photography**

This course provides individualized creative work in Photography that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 478 - Extended Studio Printmaking**

This course provides individualized creative work in Printmaking that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 479 - Extended Studio Metalsmithing**

This course provides individualized creative work in Metalsmithing that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 480 - Extended Studio Sculpture**

This course provides individualized creative work in Sculpture that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 481 - Extended Studio Fiber Art**

This course provides individualized creative work in Fiber Art that focuses on a specific concept process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 482 - Extended Studio Ceramics**

This course provides individualized creative work in Ceramics that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 483 - Extended Studio Graphic Design**

This course provides individualized creative work in Graphic Design that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 484 - Extended Studio Digital Media**

This course provides individualized creative work in Digital Media that focuses on a specific concept, process, and/or style in order to improve portfolios while using studio facilities. By permission of instructor.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ART 490 - Independent Study**

Offers the opportunities of advanced creative activity in a single area of concentration (painting, graphics, ceramics, art history, etc.) to be chosen by the student with the consent of the department. Prerequisites: Junior or senior standing, completion of lower level course offerings in chosen area of concentration, acceptance of project proposal by the department and permission of the instructor, departmental chairperson and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ART 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Biology (BIOL)

**BIOL 100 - Introductory Biology Laboratory**

This laboratory activity course is designed to introduce the non-biology major to science as a process. Basic biological concepts and principles are the focal points for the laboratory activities. The scientific process is used throughout the hands on exercises to facilitate the learning experience.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

**BIOL 101 - General Biology**

A principles course in biology, designed for non-biology majors, which emphasizes cellular structure and function, Mendelian and molecular genetics, reproduction, and classic and modern concepts of ecology and evolution.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**BIOL 105 - Environmental Biology**

A non-biology majors course which provides an introduction to ecological principles and concepts with an examination of the biological basis of contemporary environmental problems.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

**BIOL 110 - The Human Body: Fundamentals of Structure and Physiology**

This one semester lecture course is designed for non-biology majors and provides a basic introduction to the human body and the fundamental anatomy and physiology of each organ system.

Credits: 3

Thematic Thread(s): Conservation, Technology & Imagination, Human Diversity & Well-Being, Transfer Thread Completion Course

**BIOL 113 - Biology I: Foundations of Ecology, Evolution and Diversity with Lab**

A laboratory and lecture course that covers the principles of evolution, ecology and organismal diversity to prepare students for subsequent courses required of biology majors. BIOL113 and BIOL114 can be completed in any order.

Credits: 4

Enrollment limited to students with department of Biology.

**BIOL 114 - Biology II: Foundations of Molecules, Genes and Cells with Lab**

A laboratory and lecture course that emphasizes the foundational biological principles in molecular biology, cellular biology and genetics to prepare students for subsequent courses required of biology majors. BIOL113 and BIOL114 can be completed in any order.

Credits: 4

Enrollment limited to students with department of Biology.

**BIOL 120 - Plants and Society**

Basic structures, functions, and uses of plants. This course, for the non-biology major, will stress many of the economic and practical aspects of plants. It will also offer historical insights concerning the impact plants have had on world exploration, colonization, etc.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Transfer Thread Completion Course

**BIOL 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**BIOL 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with department of Biology.

**BIOL 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with department of Biology.

**BIOL 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with department of Biology.

**BIOL 201 - General Botany with Lab**

Basic biochemical, morphological, and physiological aspects of plant biology as they relate to evolution. Includes a lab.

Prerequisites: (BIOL 101<sup>C</sup> and BIOL 100<sup>C</sup>) or BIOL 104<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 4

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Biology.

**BIOL 207 - Land Plants and Their Environment/Lab**

This course for non-biology majors surveys the common plants native to Pennsylvania. Includes a lab.

Credits: 3

Term(s) Typically Offered: Offered as Needed



**BIOL 208 - Introduction to Wildlife Management/Lab**

For non-biology majors, this course covers basic ecological principles with emphasis on the taxonomy and life histories of vertebrate animals. Includes a lab.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**BIOL 210 - Medical Microbiology with Lab**

The study of pathogenic microorganisms to include taxonomy, structure, biological activities, host defense mechanisms, disease transmission, and disease states. Includes a lab.

Prerequisites: BIOL 101<sup>D</sup> or BIOL 102<sup>D</sup> or BIOL 216<sup>D</sup> or BIOL 110<sup>D</sup> or BIOL 104<sup>D</sup> or BIOL 217<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment is limited to students with a major in Biology, Biology (Pre MEd) (7-12), Biology, Biology-Prof (Pre MEd)(7-12), Health Science - Public Health, Hlth Sci-P Hlth-Pre PT-SRU 3+3, Hlth Sci-P Hlth-Pre PA-SRU 3+2, Cytotechnology, Histotechnology, Medical Technology or Professional.

**BIOL 212 - General Zoology with Lab**

The anatomy, physiology, ecology, and economic importance of representative animals with emphasis on the understanding of development and the evolutionary blueprint of the animal kingdom. Includes a lab.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 4

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Biology.

**BIOL 216 - Anatomy and Physiology I with Lab**

The first of two lecture and laboratory courses for non-biology majors which surveys the normal structure and function of the human body. It is recommended that 216 be taken prior to 217. This course includes a lab.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Enrollment is limited to students with a major in Music Therapy, Biology, Biology (Pre MEd) (7-12), Biology, Biology-Prof (Pre MEd)(7-12), Health Science - Public Health, Hlth Sci-P Hlth-Pre PT-SRU 3+3, Therapeutic Recreation Serv, Recreational Therapy, Therapeutic Recreation 3+3 PT, Rec Therapy- Pre PT-SRU 3+3, Rec Therapy-Pre OT-SRU 3+3, Hlth Sci-P Hlth-Pre PA-SRU 3+2, Cytotechnology, Histotechnology, Medical Technology or Professional.

**BIOL 217 - Anatomy and Physiology II with Lab**

The second of two lecture and laboratory courses for non-biology majors which surveys the normal structure and function of the human body. It is recommended that 216 be taken prior to 217. Includes a lab.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Enrollment is limited to students with a major in Music Therapy, Biology, Biology (Pre MEd) (7-12), Biology, Biology-Prof (Pre MEd) (7-12), Therapeutic Recreation Serv, Recreational Therapy, Therapeutic Recreation 3+3 PT, Rec Therapy- Pre PT-SRU 3+3, Rec Therapy-Pre OT-SRU 3+3, Cytotechnology, Histotechnology, Medical Technology or Professional.

**BIOL 250 - Genetics with Lab**

An introductory course that covers transmission genetics, molecular genetics, and population genetics, with an emphasis on problem-solving. Examples in both plants and animals (including humans) are considered. Includes a lab.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 4

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Chemistry or Biology.

**BIOL 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with department of Biology.

**BIOL 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with department of Biology.

**BIOL 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with department of Biology.

**BIOL 300 - Social and Ethical Issues in Genetics**

Advances in genetics have the potential to do much good, but they may also create difficult social and ethical issues that we are unprepared for. This course seeks to provide students of all majors with the necessary framework for arriving at their own conclusions about the proper role of genetic technology, for themselves, their families, and society at large.

Prerequisites: BIOL 101<sup>D</sup> or BIOL 102<sup>D</sup> or BIOL 104<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**BIOL 301 - Forest Ecology**

This course is offered as part of the Pymatuning Laboratory in conjunction with the University of Pittsburgh. For more information, please contact the Biology department, 724-738-2023.

Prerequisites: BIOL 201<sup>C</sup> and (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 302 - Ecology of Amphibians & Reptiles/Lab**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 303 - Behavioral Ecology/Lab**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 305 - Wetlands and Aquatic Plants/Lab**

This course deals with the identification and quantification of phytoplankton and vascular hydrophytes, with emphasis placed on the productivity of aquatic plants and their importance as indicator organisms. Includes a lab.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup> and CHEM 108<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Biology, Biology (Pre MEd) (7-12), Environmental Geoscience, Envir Geosci (Pre MEd) (7-12), Biology, Biology-Prof (Pre MEd)(7-12), Environmental Geoscience, Cytotechnology, Environmental Science, Environmental Chemistry, Geology, Histotechnology, Medical Technology or Professional.

**BIOL 306 - Freshwater Biomonitoring/Lab**

This course covers the identification and quantification of fish, zooplankton, and benthos organisms, with emphasis placed on the productivity of aquatic animals and their importance as indicator organisms. Includes a lab.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup> and CHEM 108<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**BIOL 307 - Vertebrate Ecology/Lab**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 308 - Aquatic Ecosystem Management / Lab**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 310 - Plant Systematics with Lab**

Evolutionary trends in floristic morphology are used to examine family relationships among the major groups of vascular plants. Includes a lab.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup> and BIOL 201<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 311 - Entomology/Lab**

Insects, including their taxonomy, structure, function, ecology, and economic importance.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 313 - Herpetology/Lab**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGE0 202<sup>C</sup>) and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 314 - Medical Parasitology with Lab**

A lecture and laboratory course which emphasizes the parasites of medical importance.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup> and (BIOL 210<sup>C</sup> or BIOL 212<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 316 - Medical Immunology with Lab**

A lecture and laboratory course which emphasized immunological principles of medical importance.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup> and (BIOL 210<sup>C</sup> or BIOL 250<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 317 - Ecology and Fungi**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGE0 202<sup>C</sup>) and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms Even

**BIOL 319 - Medical Virology with a Lab**

A lecture and laboratory course which discusses viruses of medical importance. Lecture content will focus on the life cycle, pathology and treatment of clinically relevant viruses. Laboratory content may teach students about topics such as, but not limited to, calculating viral load, detecting lysogens, detecting viruses by ELISA and immunity in lysogens.

Prerequisites: (BIOL 104<sup>C</sup> or (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>)) and (BIOL 210<sup>C</sup> or BIOL 250<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2 or Sophomore 2.

Enrollment limited to students with department of Biology.

**BIOL 320 - Ornithology/Lab**

Anatomy, physiology, taxonomy, ecology, and behavior of birds. Two weekend field trips are required. Includes a lab.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup> and BIOL 212<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 321 - Wildlife Management/Lab**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGE0 202<sup>C</sup>) and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 322 - Conservation Biology/Lab**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGE0 202<sup>C</sup>) and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

Thematic Thread(s): Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 323 - Stream Ecology/Lab**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 325 - Biometry with Lab**

An introduction to statistical techniques and experimental design as applied to biological problems. Descriptive methods, tests of significance, linear regression, correlation, analysis of variance and covariance, and non-parametric techniques are included. Use of PC and/or mainframe computer is required. Includes a lab.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Geography - Envir Studies Educ, Biology, Biology (Pre MEd) (7-12), Environmental Geoscience, Envir Geosci (Pre MEd) (7-12), Biology, Biology-Prof (Pre MEd)(7-12), Environmental Geoscience, Biology-Logan Chiropractic 3+3, Environmental Science, Geology or Professional.

**BIOL 326 - Field Methods in Biogeography/Lab**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 327 - Limnology/Lab**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 330 - Microbiology/Lab**

A consideration of the structure, metabolism, growth, and genetics of microorganisms with emphasis placed on the bacteria and viruses. Includes a lab.

Prerequisites: BIOL 250<sup>C</sup> and (CHEM 200<sup>D</sup> or CHEM 201<sup>D</sup>) and ((BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Chemistry or Biology.

**BIOL 331 - Mammology/Lab**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 335 - Cell Biology/Lab**

Lecture and laboratory investigations related to cellular structure and function. Topics include consideration of extracellular matrix, cell surface, internalization, intracellular signaling and routing, cell-cell communication, renewal, and development. Includes a lab.

Prerequisites: BIOL 250<sup>C</sup> and (CHEM 200<sup>D</sup> or CHEM 201<sup>D</sup>) and ((BIOL 100<sup>D</sup> and BIOL 101<sup>D</sup>) or BIOL 104<sup>D</sup>)

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Chemistry or Biology.

**BIOL 340 - Vertebrate Anatomy with Lab**

A comparative study of the adult structure of the organs and systems of representative vertebrates. Includes a lab.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup> and BIOL 212<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 343 - Embryology with Lab**

Developmental processes of vertebrate embryology. A comparative study of gaetogenesis, fertilization, cleavage, gastrulation, organogenesis, and embronic adaptations. Includes a lab.

Prerequisites: ((BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup>) and BIOL 212<sup>C</sup> and BIOL 340<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 350 - Evolution**

Stresses evolution as a process. Evidence of early theories, population genetics and ecology, modern synthetic theory, speciation, phylogeny, and the major features characteristic of organic evolution are included.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup> and BIOL 201<sup>C</sup> and BIOL 212<sup>C</sup> and BIOL 250<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 356 - Field Ecology / Lab**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 357 - Environmental Microbiology with Lab**

The interactions of microorganisms with their environment and with other organisms in nutrient cycles and environmental bioremediation, and the effects of microbial activity on plants and animals. Includes a lab.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup> and CHEM 108<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 4

Term(s) Typically Offered: Offered Fall Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Biology, Biology (Pre MEd) (7-12), Environmental Geoscience, Envir Geosci (Pre MEd) (7-12), Biology, Biology-Prof (Pre MEd)(7-12), Environmental Geoscience, Cytotechnology, Environmental Science, Geology, Histotechnology, Medical Technology or Professional.

**BIOL 360 - Field Botany**

A field course covering the flora of western Pennsylvania. Students will be expected to identify in the field approximately 225 vascular plants.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup> and BIOL 201<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 361 - Flora of Western Pennsylvania**

A field class with a lecture component. The primary focus of the class is to enhance student understanding of the taxonomy and ecology of species that compose our flora in western Pennsylvania. Organisms that will be covered include: flowering plants (woody angiosperms and common wildflowers), conifers, ferns & fern allies, bryophytes, lichens, and some representative fungi and macroalgae in our flora. Terminology associated with general plant/fungal/algal structure as well as life cycles of these aforementioned organisms will be described. Students will be introduced to both terrestrial and aquatic ecosystems and the habitats that select species require.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**BIOL 370 - Molecular Biology with Lab**

A lecture and laboratory study of the structure and function of biological macromolecules and of the functions of living cells at the molecular level. Topics include macromolecular structures, gene expression and regulation, and manipulations of genetic material. Includes a lab.

Prerequisites: ((BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup>) and BIOL 250<sup>C</sup> and (CHEM 200<sup>D</sup> or CHEM 201<sup>D</sup>)

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Chemistry or Biology.

**BIOL 371 - Vertebrate Field Zoology**

Taxonomy, life histories, and ecological relationships of representative vertebrates are stressed. Several field trips are required.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.



**BIOL 373 - Ichthyology/Lab**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 375 - Ecology of Fish / Lab**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup> and BIOL 212<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 400 - Disease Ecology**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

**BIOL 401 - Ecology with Lab**

Emphasis is placed on the structure, composition, and dynamics of ecosystems. Lab work primarily consists of field studies.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup> and CHEM 108<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Summer Terms

Thematic Thread(s): Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment is limited to students with a major in Biology, Biology (Pre MEd) (7-12), Environmental Geoscience, Envir Geosci (Pre MEd) (7-12), Biology, Biology-Prof (Pre MEd)(7-12), Environmental Geoscience, Cytotechnology, Environmental Science, Environmental Chemistry, Geology, Histotechnology, Medical Technology or Professional.

**BIOL 402 - Biogeography/Lab**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**BIOL 405 - Animal Physiological Ecology with Lab**

The adaptations of animals to deal with specialized environmental situations are studied at levels ranging from biochemical to organismal. Includes a lab.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup> and BIOL 212<sup>C</sup>

and CHEM 107<sup>D</sup> and CHEM 108<sup>D</sup>

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 410 - Animal Physiology with Lab**

Basic animal physiological processes, including a synthesis that begins at the molecular level and moves to the more complex cellular and organismal levels. Includes a lab.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup> and BIOL 212<sup>C</sup> and CHEM 201 (may be taken concurrently)<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 411 - Population Biology/Lab**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 412 - Population Biology**

This field course is offered by the University of Pittsburgh to Slippery Rock University students who enroll in the summer program at the Pymatuning Laboratory of Ecology. For more information, please contact the Biology Department, 724-738-2023.

Prerequisites: (BIOL 113<sup>C</sup> or EGEO 202<sup>C</sup>) and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**BIOL 430 - Pathogenic Microbiology with Lab**

This course examines the role of bacteria in disease processes with emphasis on host-pathogen interactions and mechanisms by which pathogenic bacteria cause disease. General topics to be discussed include pathogenesis, epidemiology, and characteristics of the major pathogenic bacteria, which allow them to produce a disease state in the host. Includes a lab.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup> and BIOL 250<sup>C</sup> and BIOL 330<sup>D</sup>

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 450 - Biology Internship**

This course will permit the biology major to obtain credit for on-the-job experience in such areas as hospitals, greenhouses, nurseries, sewage plants, fish, and game commissions, park service, plant breeders, and seed producers, veterinary medicine, etc.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup> and BIOL 201<sup>C</sup> and BIOL 212<sup>C</sup> and BIOL 250<sup>C</sup> and CHEM 107<sup>D</sup> and CHEM 108<sup>D</sup> and CHEM 111<sup>D</sup> and CHEM 112<sup>D</sup> and CHEM 201<sup>D</sup> and CHEM 211<sup>D</sup> and CHEM 202<sup>D</sup> and CHEM 212<sup>D</sup>

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 1-6

Term(s) Typically Offered: Offered Every Term

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 451 - Plant Physiology/Lab**

A lecture-laboratory study of the functional relationships of the plant body including such topics as nutrition, water relations, photosynthesis, photo-periodism, hormones, and growth processes.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup> and BIOL 201<sup>C</sup> and CHEM 201<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 470 - Histology with Lab**

Microscopic structure and arrangement of tissues in multicellular organisms. Prepared microscopic slides of representative animal organs are studied. Includes a lab.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup> and BIOL 212<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 490 - Independent Study**

Independent research under the guidance of a faculty member.

Prerequisite: Permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. (repeatable up to 6 credits) Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 492 - Biology Seminar**

For junior and senior biology majors. Each semester a different area of current research interest is chosen for study.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup> and BIOL 201<sup>C</sup> and BIOL 212<sup>C</sup> and BIOL 250<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

**BIOL 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisites: (BIOL 100<sup>C</sup> and BIOL 101<sup>C</sup>) or BIOL 104<sup>C</sup> and BIOL 201<sup>C</sup> and BIOL 212<sup>C</sup> and BIOL 250<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Biology.

## Chemistry (CHEM)

**CHEM 104 - Introduction Chemistry I**

This course is the first course in a two-semester sequence for non-science majors which introduces the fundamental principles of Chemistry. Although this course serves as a prerequisite for the next course in the sequence (CHEM 106), it is also designed as a stand-alone course. This allows students to take either this course alone or the two-semester sequence and still obtain a basic understanding of chemical principles. The principles of chemistry are developed and illustrated through selective application. Note: This course is not a substitution for CHEM 107 and students cannot receive credit for CHEM 104 and CHEM 107. Also note that this course does not serve as a prerequisite for CHEM 108.

Credits: 3

Term(s) Typically Offered: Offered Every Term

**CHEM 106 - Introductory Chemistry II**

This is the second course in a two-semester sequence of an introductory chemistry course for non-science majors. The course will build on the principles presented in CHEM 104 which is a prerequisite for this course and will focus on the areas of organic and biochemistry. As with CHEM 104, this course will concentrate on the basic principles of chemistry and illustrate them through selected applications.

Prerequisites: CHEM 104<sup>C</sup> or CHEM 107<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Winter, Spring&Summer

**CHEM 107 - General Chemistry I**

Topics include nomenclature, stoichiometry, kinetic-molecular theory, gas laws, electronic structure, periodicity, and chemical bonding. Stoichiometry is emphasized.

Prerequisites: (ACSD 110<sup>D</sup> or ESAP 110<sup>D</sup>) or MATH 199<sup>D</sup> or minimum score of Y in 'WAIVE ACSD110 W HIGHER MATH' or minimum score of 30 in 'ALEKS PPL Assessment'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Summer Terms

**CHEM 108 - General Chemistry II**

Topics include intermolecular forces, solutions, colloids, chemical kinetics, thermodynamics, equilibria (acid-base, solubility, and complex ion), electro-chemistry, and the transition elements.

Prerequisite: CHEM 107<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring & Summer Terms

**CHEM 110 - Contemporary Chemistry Laboratory**

Laboratory to accompany Chemistry 104 providing basic chemistry and environmentally related experiences. One two-hour laboratory per week.

Prerequisite: CHEM 104 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offerings Vary

**CHEM 111 - General Chemistry I Lab**

A laboratory to accompany CHEM 107. Laboratory experiments are designed to develop basic laboratory skills and illustrate concepts.

Prerequisite: CHEM 107 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Fall & Summer Terms

**CHEM 112 - General Chemistry II Lab**

A laboratory to accompany CHEM 108. Laboratory experiments illustrate the concepts of General Chemistry II.

Prerequisites: CHEM 107<sup>C</sup> and CHEM 111<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Spring & Summer Terms

**CHEM 113 - Clinical Chemistry Laboratory**

Laboratory to accompany CHEM 103 providing basic chemistry and health-related experiences. One two-hour laboratory per week.

Prerequisite: CHEM 104 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offerings Vary

**CHEM 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**CHEM 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CHEM 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**CHEM 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CHEM 200 - Fundamentals of Organic Chemistry**

A one semester introductory course that covers the most commonly encountered properties of the major families of organic compounds. The course is designed for students pursuing a B.S. in environmental science. Not equivalent to CHEM 201.

Prerequisites: CHEM 108<sup>C</sup> and CHEM 112<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Summer & Winter Terms

**CHEM 201 - Organic Chemistry I**

Modern theories relating molecular structure to chemical reactivity are stressed. Elucidation of molecular structure by infrared, ultraviolet, nuclear magnetic resonance and mass spectroscopy is also covered.

Prerequisites: CHEM 108<sup>C</sup> and CHEM 112<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Summer Terms

**CHEM 202 - Organic Chemistry II**

Modern theories relating molecular structure to chemical reactivity are stressed. Elucidation of molecular structure by infrared, ultraviolet, nuclear magnetic resonance and mass spectroscopy is also covered.

Prerequisite: CHEM 201<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring & Summer Terms

**CHEM 204 - Introduction to Forensic Science**

Forensic science is the application of science to the examination of physical evidence obtained in the investigation of a crime. The Introduction to Forensic Science course uses high impact practices to provide an immersed research experience for students in the different steps of the scientific method, while learning about the multidisciplinary and interdisciplinary nature of Forensic Science.

Credits: 3

Thematic Thread(s): Citizenship & Social Problems, Institutions & Human Innovations, Transfer Thread Completion Course

**CHEM 211 - Organic Chemistry Laboratory I**

A laboratory course in which students employ the synthetic techniques and analytical procedures of organic chemistry.

Prerequisites: CHEM 112<sup>C</sup> and CHEM 201<sup>\*C</sup> and CHEM 108<sup>C</sup> (may be taken concurrently).

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall & Summer Terms

**CHEM 212 - Organic Chemistry Laboratory II**

A laboratory course in which students employ the synthetic techniques and analytical procedures of organic chemistry.

Prerequisites: CHEM 201<sup>C</sup> and CHEM 211<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Spring & Summer Terms

**CHEM 240 - Industrial Hygiene**

Requirements to preserve worker health and safety will be surveyed.

Prerequisites: CHEM 108<sup>D</sup> and (CHEM 200<sup>D</sup> or CHEM 201<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

**CHEM 243 - Introduction to Research in Chemistry**

This is a one semester seminar covering faculty research within the chemistry department, use of library resources, internship opportunities available to undergraduate students, and basic safety training. This course is intended primarily for first-semester sophomore chemistry majors but is open to students from other majors in CHES who might be interested in pursuing undergraduate research in chemistry.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with a semester level of Junior 1, Junior 2, Sophomore 1 or Sophomore 2.

Enrollment limited to students in the College of Engineering & Science college.

**CHEM 270 - Industrial Chemistry**

A study of industries with emphasis on economic, technical, and possible ecological factors affecting process design. Includes on-site lectures and discussions of various industries in the area.

Prerequisites: CHEM 108<sup>D</sup> and CHEM 112<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

**CHEM 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CHEM 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**CHEM 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CHEM 301 - Physical Chemistry I**

Thermodynamics and chemical kinetics. Cross listed as PHYS301.

Prerequisites: CHEM 108<sup>C</sup> and CHEM 112<sup>C</sup> and (PHYS 212<sup>C</sup> or PHYS 213<sup>C</sup>) and MATH 230<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 302 - Physical Chemistry II**

Quantum mechanics and spectroscopy.

Prerequisites: MATH 230<sup>C</sup> and CHEM 108<sup>C</sup> and CHEM 112<sup>C</sup> and PHYS 211<sup>C</sup> and (PHYS 212<sup>C</sup> or PHYS 213<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 321 - Physical Chemistry Laboratory I**

Principles from Thermodynamic principles will be employed in the laboratory for determining and relating physical properties such as viscosity, surface tension, boiling and freezing points to the identity, and composition of chemical substances.

Prerequisites: CHEM 301 (may be taken concurrently)<sup>D</sup> or PHYS 301 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 322 - Physical Chemistry Laboratory II**

Applied principles from Physical Chemistry II lecture will be used for interpreting results from experiments involving kinetics, equilibria, and spectrophotometric data.

Prerequisite: CHEM 302 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 335 - Biochemistry I**

The study of structures and physical properties of biological molecules.

Prerequisites: BIOL 104<sup>C</sup> and CHEM 202<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 336 - Biochemistry Laboratory I**

A laboratory course in which the student uses techniques employed in biochemical investigations.

Prerequisites: CHEM 335 (may be taken concurrently)<sup>C</sup> and CHEM 212<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**CHEM 337 - Biochemistry II**

Investigates the basic theme of intermediary metabolism. A background for this study is gained through study of the chemistry of cellular constituents.

Prerequisites: CHEM 335<sup>C</sup> and CHEM 336<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 338 - Biochemistry Laboratory II**

This is a one-credit course in biochemical techniques used in the investigation, isolation and purification of biomolecules. The student will get an exposure to and an appreciation for problem solving utilizing a research-oriented approach.

Prerequisites: CHEM 336<sup>C</sup> and CHEM 337<sup>\*C</sup> (may be taken concurrently).

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 340 - Air Quality Assessment**

A study of the quality of the air environment. Air quality assessment and potential problems will be examined both in lecture discussions and in laboratory or field situations. (Includes ambient air testing.) Three hours of lecture and three hours of laboratory per week.

Prerequisites: CHEM 200<sup>C</sup> or CHEM 201<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 4

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 350 - Analytical Chemistry**

Topics include gravimetric and volumetric analysis of chemical systems. Special emphasis is given to titrimetric methods based on acid-base, complexation, and oxidation-reduction reactions.

Prerequisites: CHEM 108<sup>C</sup> and CHEM 112<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 351 - Analytical Chemistry Lab**

Students develop practical skills employed in the quantitative analysis of chemical systems.

Prerequisites: CHEM 350 (may be taken concurrently)<sup>C</sup> and CHEM 108<sup>C</sup> and CHEM 112<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 370 - Water Quality Assessment**

Water quality assessment and water quality problems will be examined both in lecture discussions and in laboratory or field situations. Three hours of lecture and three hours of laboratory per week.

Prerequisites: CHEM 200<sup>C</sup> or CHEM 201<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 4

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 415 - Forensic Analysis**

The application of analytical chemistry including instrumental methods to the investigation and interpretation of crime scene evidence.

Prerequisites: CHEM 350<sup>C</sup> and CHEM 351<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 416 - Forensic Analysis Lab**

The application of instrumental methods of analysis to the interpretation of crime scene evidence.

Prerequisites: CHEM 350<sup>C</sup> and CHEM 351<sup>C</sup> and CHEM 415<sup>\*C</sup> (may be taken concurrently).

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 425 - Instrumental Analysis**

A lecture course to introduce the student to the theory, advantages, disadvantages, limitations, and power of contemporary chemical instrumentation, including computational methods.

Prerequisites: CHEM 350<sup>C</sup> and MATH 225<sup>C</sup> and PHYS 211<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 426 - Instrumental Analysis Laboratory**

A three hour per week laboratory accompanying CHEM 425.

Instrumentation and computing technology will be applied to quantitative problems of chemistry.

Prerequisite: CHEM 425 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 430 - Industrial Pollution Control Engineering**

Economic and technical problems will be discussed as related to the abatement of harmful discharges from industrial sources. Systems analysis will be employed in the examination of engineering solutions in the physical or chemical treatment of discharge. Three hours of lecture per week or a field trip.

Prerequisites: CHEM 108<sup>D</sup> and CHEM 112<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 442 - Inorganic Chemistry**

A lecture course covering atomic structure, bonding, and properties of inorganic compounds. Coordination chemistry and other topics of current research interest are covered. Offered in alternate years.

Prerequisite: CHEM 202<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 450 - Chemistry Internship**

Supervised placement and research in selected public and private agencies. (Credits earned will be counted as free electives and will not be counted toward the chemistry major.)

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 452 - Physical Inorganic Chemistry Laboratory**

A laboratory course illustrating techniques of synthesis and characterization of inorganic compounds using a variety of spectroscopic and magnetic measurements, and using computational chemistry methods to investigate the electronic structure of compounds.

Prerequisites: CHEM 212<sup>C</sup> and CHEM 442<sup>\*C</sup> (may be taken concurrently).

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 460 - Materials Chemistry**

A one semester introductory course that covers the synthesis, analysis, and properties of polymers and solid state materials. Applications to industrial and practical application will be discussed.

Prerequisite: CHEM 202<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 475 - Advanced Organic Synthesis**

A one semester course that includes an advanced organic chemistry synthesis laboratory. The lecture part covers modern synthetically useful reactions and their applications. The intensive laboratory offers the students an introduction to organic synthesis research, including the use of modern reagents and instruments. Students will become acquainted with techniques of preparation, purification and spectroscopic identifications of organic compounds.

Prerequisites: CHEM 202<sup>C</sup> and CHEM 212<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 4

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 490 - Independent Study**

Independent Study courses offer a student the opportunity to carry out original, chemical research in a Chemistry Department, employing all facilities available through the department. Students must properly write and submit an ACS-style report to their faculty advisor or department chair for evaluation.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 491 - Chemistry Seminar**

For junior chemistry majors. On-line searches of the chemical literature lead to oral presentations and written reports in a selected area of research.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 496 - Research**

Offers a student the opportunity to carry out chemical research in the laboratory, employing all departmental facilities, and the experience of writing a thesis under the direction of a faculty mentor.

Credits: 1-3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHEM 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Chinese (CHIN)

**CHIN 101 - Chinese Language and Culture I**

This course is the first in a three course series which will provide an introduction to the Mandarin language.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Thematic Thread(s): Transfer Thread Completion Course

**CHIN 102 - Chinese Language and Culture II**

This course is the second in a three course series which will provide an introduction to the Mandarin language.

Prerequisite: CHIN 101<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Thematic Thread(s): Transfer Thread Completion Course

**CHIN 103 - Chinese Language and Culture III**

This course is the third in a three course series which will provide an introduction to the Mandarin language.

Prerequisite: CHIN 102<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Thematic Thread(s): Transfer Thread Completion Course

**CHIN 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**CHIN 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CHIN 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**CHIN 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CHIN 202 - Intermediate Chinese I**

Comprehensive review of the Mandarin language with emphasis on developing the students' abilities for proficient oral and written accomplishments.

Prerequisite: CHIN 103<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**CHIN 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CHIN 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**CHIN 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CHIN 306 - Survey of Chinese Civilization and Culture**

A study of the important aspects of China's culture, including its geography, history, social and political values, arts, sciences, literature, religion, and ideology. Course is taught in English and open to all interested persons.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHIN 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHIN 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHIN 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHIN 490 - Independent Study**

Students have an opportunity to study selected areas in greater concentration. The nature of the topic selected and its treatment are determined in consultation with the instructor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHIN 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CHIN 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Civil Engineering (CIVL)

**CIVL 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**CIVL 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CIVL 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**CIVL 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CIVL 210 - Elementary Survey**

Introductory course in surveying methods and theory. Topics will include surveying, and route surveying.

Prerequisite: MATH 225<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**CIVL 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CIVL 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**CIVL 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CIVL 310 - Structural Engineering**

Introduction to the elastic behavior of structural components. Analysis of statically determinate systems. Deflection calculations by virtual work and elastic load methods. Analysis of simple statically indeterminate structures. Influence lines. Interaction of structural components. Typical structural engineering loads.

Prerequisite: ENGR 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 320 - Transportation Engineering**

Introduction to basic concepts in transportation engineering including: planning, design, and operations. Introduces the challenges and issues in modeling transportation problems. Studies of various concepts related to the design of highway facilities, level of service, and demand for transportation services. Concepts related to signal optimization, policy implications and the basics of transportation planning.

Prerequisite: MATH 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 330 - Environmental Engineering**

A course in environmental engineering fundamentals that applies biological, chemical, and mathematical principles to solve environmental engineering problems using the mass balance approach.

Prerequisites: MATH 230<sup>D</sup> and BIOL 101<sup>D</sup> and CHEM 107<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 340 - Geotechnical Engineering**

Soil properties, identification and classification of earth material; subsurface exploration; soil strength, stresses, settlement, substructure design; computer applications.

Prerequisite: ENGR 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 350 - Water Resources Engineering**

This course is designed to review the fundamentals and practices of water resources engineering with a focus on engineering applications of hydraulics and hydrology. The concepts of fluid mechanics (hydrostatics, conservation laws) will be applied to analyze flow phenomena in demonstrations and field trips.

Prerequisite: ENGR 301<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**CIVL 410 - Structural Steel Design**

This course covers the analysis and design of structural steel members for tensile, compressive, flexural and combined loading.

Prerequisite: CIVL 310<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 411 - Reinforced Concrete Design**

This course covers strength design concepts, beams, columns, slabs, retaining walls, single and combined footings with computer applications.

Prerequisite: CIVL 310<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 412 - Finite Element Analysis**

Modern analysis techniques used to investigate a variety of systems in engineering and science. Computational models of problems are developed using energy concepts, structural mechanics, and matrix operations. The methods used are implemented using a general finite element program and the accuracy of the results is evaluated. The learned theoretical approach is applied to common structural elements such as trusses, beams, frames, and plates.

Prerequisite: CIVL 310<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 420 - Traffic Engineering**

This course covers the fundamentals of traffic engineering and traffic flow theory: traffic signal design, intersection design, and traffic impact studies. Students will be taught using Highway Capacity Software, SYNCHRO, and other traffic software packages.

Prerequisite: CIVL 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 421 - Highway Engineering**

Principles of geometric design of highways, intersections, interchanges, and terminals. Practical issues of vertical and horizontal curvature, highway evaluation, driver and vehicle dynamics, and traffic safety are also addressed. Computer-aided design and modeling.

Prerequisite: CIVL 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 422 - Transportation Terminal Design**

The course covers the transportation design of airports, rail stations and truck terminals to facilitate the transport of passengers and freight in the transportation systems. Terminals are designed to provide security, storage, and access to different modes of transportation.

Prerequisite: CIVL 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 430 - Storm Water Management**

Quality and quantity of urban storm water. Receiving water problems and sources of pollutants. Runoff quality and quantity characteristics. Selection and design of controls; regulations.

Prerequisite: CIVL 350<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 431 - Environmental Engineering Design**

Process design of treatment/remediation systems to solve specific environmental problems, including evaluation alternatives and computer simulation.

Prerequisite: CIVL 330<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 432 - Groundwater Hydrology**

The course covers the fundamental science and engineering behind groundwater systems, including but not limited to: the hydrologic cycle, groundwater flow, and wellhead protection and management.

Prerequisite: CIVL 350<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 440 - Construction Management**

Provides students with an overview of the responsibilities and risk associated with management within the construction industry.

Emphasis is given to responsibilities and relationships between owners, contractors, labor and suppliers, construction estimates and schedules, construction contracts and safety.

Prerequisite: CIVL 340<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 441 - Sustainable Development**

Provides an overview of sustainable development with emphasis on the role of the engineer. Study the role of LEED and other sustainable development programs in changing development design.

Prerequisite: CIVL 330<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 460 - Capstone Design I**

This course will provide students with the opportunity to work as part of a multi-disciplinary Civil Engineering design team. The course will consist of developing the preliminary design plans with presentations and reports. Students will learn about the regulatory process, LEED design, and site planning. Lectures in professional practice and teaming will augment the design project.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Civil Engineering.

**CIVL 461 - Capstone Design II**

This course will provide students with the opportunity to work as part of a multi-disciplinary Civil Engineering design team. The course will consist of a design project with presentations and reports. Lectures in professional practice and teaming will augment the design project.

Prerequisite: CIVL 460<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Civil Engineering.

**CIVL 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CIVL 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Computer Science (CPSC)

**CPSC 099 - Computer Competency Exam**

This non-credit course is used to identify students who have met the university's computer competency requirement by earning a passing grade on the Computer Competency Placement Test.

Credits: 0

**CPSC 100 - Introduction to Computing for Liberal Arts**

A pass/no credit course to provide an introduction to the computer capabilities needed to succeed in an Information Society. This course is designed to support the SRU Computer Competency requirement. Topics will include computer hardware, software, networking, security and privacy, and societal issues.

Credits: 1

Term(s) Typically Offered: Offered Every Term

**CPSC 102 - Collaborative Information Technology and Society**

We will explore how the use of collaborative information technology impacts human interaction in globally diverse contexts. The course provides an introduction to the historical development, current use and future directions of collaborative technology in human societies. We will address how to manage and protect personal computing devices and communication, along with the ethical, legal and social issues involved in the use of these collaborative technologies.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

**CPSC 110 - Computer Concepts**

A computer literacy course stressing the use of application software on personal computers. It covers a survey of computers and their impact on society and the use of word processing software. Other application software is also covered, such as spreadsheets and database software, but the particular applications examined may vary from section to section.

Credits: 3

Term(s) Typically Offered: Offered Every Term

**CPSC 125 - 3D Modeling for Computing**

This course introduces students to 3D modeling for applications in computing fields. It covers the basic and intermediate features in 3D modeling software tools, which are utilized in applications such as 3D visualization, 3D animation, virtual reality/augmented reality, and 3D game design. This course also introduces students to the printing of 3D objects.

Prerequisites: CPSC 100<sup>D</sup> or CPSC 110<sup>D</sup> or CPSC 130<sup>D</sup> or PE 202<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**CPSC 130 - Introduction to Computing and Programming**

An introductory course devoted to programming and to a description of hardware and software concepts. Programming concepts covered include top-down program development using pseudocode, algebraic notation, standard control structures, and arrays in an appropriate programming language. Other topics include binary representation, storage, and general architecture and functioning of a computer system. Keywords: computer science

Prerequisites: (ACSD 110<sup>D</sup> or ESAP 110<sup>D</sup>) or minimum score of 18 in 'Math ACT Exc 2 - EX110-PL MATH' or minimum score of 421 in 'Math SAT Exc 2 - EX110-PL MATH'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**CPSC 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**CPSC 140 - Introduction to Programming Principles**

Techniques are stressed that enable systematic development of clear, correct programs. Other topics include data types, algebraic notation, standard control structures, functions; input/output, arrays, and program testing and debugging. This course will be taught in C++.

Prerequisites: (ACSD 110<sup>D</sup> or ESAP 110<sup>D</sup>) or minimum score of 18 in 'Math ACT Exc 2 - EX110-PL MATH' or minimum score of 421 in 'Math SAT Exc 2 - EX110-PL MATH'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**CPSC 146 - Programming Principles**

Techniques are stressed that enable systematic development of clear, correct programs. Other topics include data types, algebraic notation, standard control structures, functions; input/output, arrays, and program testing and debugging. Programs will be written in the department's current official programming language of instruction.

Prerequisites: (ACSD 110<sup>C</sup> or ESAP 110<sup>C</sup>) or minimum score of 18 in 'Math ACT Exc 2 - EX110-PL MATH' or minimum score of 421 in 'Math SAT Exc 2 - EX110-PL MATH'

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**CPSC 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CPSC 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**CPSC 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CPSC 207 - Shell Commands and Scripting**

This course introduces the student to the shell commands and shell programming in prevalent operating systems (OS). The architecture of the PC and how it relates to the OS is discussed conceptually and physically examined. The hardware and software required for data communication are discussed.

Prerequisites: CPSC 130<sup>D</sup> or CPSC 146<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**CPSC 210 - Productivity Software**

An in-depth, practical study of existing productivity software packages that focuses primarily on decision-support systems for microcomputers. Projects will involve the use of intermediate and advanced features of various software packages, as well as the use of several packages in finding computer-based solutions to information storage and retrieval problems.

Prerequisites: CPSC 100<sup>P</sup> or CPSC 110<sup>D</sup> or CPSC 099<sup>D</sup> or CPSC 130<sup>D</sup> or minimum score of 01 in 'Computer Competency Exam'

<sup>P</sup> Requires minimum grade of P.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**CPSC 217 - Advanced Web Programming**

This course continues the coverage of JavaScript features for creating web pages with DOM features. Advanced topics are discussed including CSS scripting, arrays, functions, the creation and utilization of objects, mouse and browser events, pop-up windows, and forms. This course prepares students to learn spin-off languages and introduces the use of 3rd party libraries and APIs.

Prerequisites: CPSC 130<sup>D</sup> and CPSC 146<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**CPSC 236 - Selected Computer Languages**

A selected prevalent computer language(s) other than those taught regularly in other Computer Science courses will be studied and used for programming. Topics will include data structure, control structures, data control, modularization and other features of the language. Special applications, if any, of the language will be studied. The student is expected to have basic programming experience in at least one other language. For different languages, this course may be repeated for credit toward graduation, but not toward Computing major or minor.

Prerequisites: CPSC 130<sup>D</sup> or CPSC 146<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**CPSC 237 - Mobile App Development for Smart Devices**

This course is a practical and comprehensive approach to designing, building, testing, and deploying mobile applications on mobile devices. Students build mobile applications that leverage device features and 3rd party application programming interfaces (APIs) to create stable and robust software. Topics covered include application design, memory constraints, input methods, data handling, interfacing with device APIs and connectivity.

Prerequisite: CPSC 217<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**CPSC 246 - Advanced Programming Principles**

This course places its emphasis on data and their role in software development. Such a study relies on a two-step approach to data abstraction. In the first step, data must be viewed as abstract objects. These objects are selected and specified so as to be useful in the solution of programming projects. In the second step, the abstract objects are translated into program data structures. An extensive examination of data structures provides the student many opportunities to explore the issues of implementing data abstractions. This course will be taught in C++ and will include an introduction to Unix/Linux.

Prerequisites: CPSC 146<sup>D</sup> and (MGMT 219<sup>D</sup> or ECON 219<sup>D</sup> or BUSA 219<sup>D</sup> or MATH 125<sup>D</sup> or MATH 152<sup>D</sup> or STAT 152<sup>D</sup> or MATH 225<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**CPSC 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CPSC 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**CPSC 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CPSC 300 - Challenges of Computer Technology**

An in-depth study of the critical issues related to the computerization of society. Ethical, legal, and moral issues raised by the evolution of computer technology will be discussed.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Conservation, Technology & Imagination, Transfer

Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 301 - Practical Computer Security**

This course is a practical introduction to the threats present to the online, electronic community, and how to protect yourself and your organization from them. We will explore the connectivity structure of the Internet, along with the security and criminal threats to members of the online community. The legal, ethical, and technical issues related to threats such as viruses, worms, and identity theft will be covered.

Prerequisites: CPSC 099<sup>D</sup> or CPSC 110<sup>D</sup> or CPSC 130<sup>D</sup> or CPSC 100<sup>P</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>P</sup> Requires minimum grade of P.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 305 - Introduction to Expert Systems**

An overview of the purpose, structure, and applications of expert systems. Topics covered will include expert systems technology, knowledge engineering, applications of expert systems, expert systems development, and the future of expert systems.

Prerequisites: CPSC 100<sup>P</sup> or CPSC 110<sup>D</sup> or CPSC 130<sup>D</sup> or CPSC 099<sup>D</sup>

<sup>P</sup> Requires minimum grade of P.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 311 - Discrete Computational Structures**

Introduces computational implementations of the mathematical structures most frequently used in computing including sets, equivalence relations, functions, graphs, trees and standard logic. Also introduces automata, formal languages, countability, decidability and computational complexity, Markov and stochastic processes. The course will stress traditional programming and mathematical approaches to these structures such as the use of recursion, elementary data structure, and proof techniques to instantiate, parse, traverse, demonstrate correctness, or use these computational objects.

Prerequisites: MATH 125<sup>D</sup> and CPSC 146<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 315 - Internet of Things (IoT)**

This course introduces the students to digital electronics and programming based on popular single-board microcontroller and single-board computer system platforms to interact with the environment. Sensors and actuators are utilized for communication and applications in the internet of things (IoT), smart homes, robotics, cyber-physical systems and sensor networks. Topics include the architecture of single-board microcontroller and single-board computer system, basic electricity and electronics, IoT building blocks, connections and configuration, and programming.

Prerequisites: CPSC 146<sup>D</sup> and CPSC 207<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 317 - Server-Side Scripting**

This course emphasizes programming using scripting languages for the purpose of creating the back-end of web applications. A variety of languages and utilities available on the web server are covered. The student is expected to have programming experience, knowledge of the Unix/Windows environments, and knowledge of database.

Prerequisites: CPSC 217<sup>D</sup> and CPSC 207<sup>D</sup> and CPSC 323<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 323 - Fundamentals of Database Systems**

A practical approach to analysis, design, and implementation of database systems. This course covers topics such as: conceptual, logical and physical data models; relational database and relational algebra; building and mapping entity relationship diagrams (ERDs); normalization; basic and advanced Structured Query Language (SQL) for data retrieval and manipulation; functions, triggers, and procedures; transactions and concurrency control; security, backup, and recovery procedures.

Prerequisites: CPSC 130<sup>D</sup> or CPSC 146<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 327 - Administration and Security**

Students will learn administration techniques for at least two popular computer operating systems, with special attention to system security. Techniques for managing networking, remote printing, storage allocation, account management, and backup will be discussed. Common techniques for breaching system security, and methods of defense against such attacks, will be emphasized.

Prerequisites: CPSC 207<sup>D</sup> and (CPSC 246<sup>D</sup> or CPSC 217<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 333 - Introduction to Computer Forensics**

This is a fundamental course which covers computer forensics. This class covers methods and tools for gaining forensic information from computer systems and networks. It includes case studies of cybercrimes as well as the application and management of cyber forensics. The course introduces students to forensics tools using hands-on experience and the Internet.

Prerequisites: CPSC 099<sup>P</sup> or CPSC 100<sup>P</sup> or CPSC 110<sup>D</sup> or CPSC 130<sup>D</sup> or CPSC 210<sup>D</sup> or PE 202<sup>D</sup> or MIS 210<sup>D</sup>

<sup>P</sup> Requires minimum grade of P.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 337 - Introduction to Web Graphics**

This course will expose the student to the standards for Web and mobile graphics such as SVG, CSS and canvas. Topics include color models, coordinate systems, coordinate transformations and popular image formats. Differences between vector and pixel-based approaches and between declarative and scripted models of graphical content creation are also covered.

Prerequisites: CPSC 217<sup>D</sup> or (CPSC 130<sup>D</sup> and CPSC 246<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**CPSC 342 - Introduction to Bioinformatics**

It is a practical course that introduces a wide range of bioinformatics tools, algorithms and biological databases. A broad array of topics in Bioinformatics will be covered such as: overview of Bioinformatics, biological databases, sequence alignment, multiple sequence alignment, molecular phylogeny and evolution, gene expression analysis, protein structure and genome mapping.

Prerequisites: BIOL 250<sup>C</sup> and (BIOL 104<sup>C</sup> or (BIOL 101<sup>C</sup> and BIOL 100<sup>C</sup>))  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 358 - Simulation**

Models of real-life phenomena are programmed with a current simulation language. These are run and adjusted for accurate prediction and explanation. Other simulation languages are surveyed, and needed statistical background is reviewed.

Prerequisites: CPSC 146<sup>D</sup> and (ECON 219<sup>D</sup> or MGMT 219<sup>D</sup> or MATH 152<sup>D</sup> or MATH 352<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 370 - Computer Organization and Architecture**

This course will study computer organization topics such as data representation, Boolean logic, memory hierarchy, and data path design. It will study computer architecture topics such as CPU control, pipelining and instruction set architecture. The course will also introduce the architecture and software models involved in parallel computing. Students will learn the assembly level machine organization by means of a standard assembly language.

Prerequisites: CPSC 150<sup>D</sup> or CPSC 246<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 374 - Algorithms and Data Structures**

This course establishes a foundation for the systematic study of algorithms and data structures. The integration of these two concepts into a single organizational structure emphasizes that algorithms and data structures are inseparably inter-twined. This course builds and elaborates on the concepts introduced in CPSC 246. This course will be taught in a language other than that used in CPSC 246.

Prerequisites: CPSC 246<sup>D</sup> and CPSC 311<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 376 - Programming Language and Theory**

Programming languages are studied from the theoretical viewpoint. The goal is deeper understanding of the design and translation of computer languages. Topics include compilation, automata and formal languages, computability by Turing machines and recursive functions, uncomputability, data types, data structures, binding scope, control mechanisms, conversions, storage management, reliability, portability, modularity, documentation, implementation methods and language extensibility.

Prerequisites: CPSC 150<sup>D</sup> or CPSC 246<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 378 - Theory of Computation**

Both the classical and the contemporary theories of computation will be discussed in this course. The topics covered include the theory of automata and formal languages, computability by Turing machines and recursive functions, uncomputability, and proof of correctness of code.

Prerequisites: CPSC 311<sup>D</sup> or MATH 131<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Prerequisites: CPSC 150<sup>D</sup> or CPSC 246<sup>D</sup> or CPSC 217<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 405 - Data Mining & Analysis**

This course provides a survey of data analysis and data mining techniques for finding patterns in data. It will emphasize using data models, data gathering and storage, selection and preparing of data, model building and testing and interpreting and validating results. If the student takes CPSC 405 for the undergraduate program, he/she can take CPSC 605 for additional credits.

Prerequisite: CPSC 323<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Students cannot enroll who have a program in Health Informatics.

**CPSC 406 - Data Visualization**

This course provides a survey of techniques for visualizing patterns in data. The course will emphasize modern and traditional methods for data visualization, including interactive visualization for data sets too large to display statically. If the student takes CPSC 406 for the undergraduate program, he/she can take CPSC 606 for additional credits.

Prerequisites: (MATH 152<sup>D</sup> or STAT 152<sup>D</sup>) and CPSC 146<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 415 - Advanced Bioinformatics**

Advanced topics in Bioinformatics will be discussed in this course including: motif searching, biological networks analysis, next generation sequencing data analysis, programming for genomic data analysis, Data Mining techniques for biology problems such as Clustering of gene expression data, and Classification for protein function prediction.

Prerequisite: CPSC 342<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

**CPSC 417 - Advanced Web Technologies**

This course emphasizes up-to-date technologies that enable the development of interactive Web applications. New Web standards and their applications and development toolkits will be exemplified. Advanced concepts in scripting languages for the Unix and Windows environments will be discussed.

Prerequisite: CPSC 317<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 423 - Computer Networks**

This is an introduction to computer networks and data communications.

Course content includes: the layered model; transmission and multiplexing; data link protocols; packet, point-to-point, and satellite transmission; local area networks; security and privacy. Examples of some well-known networks will be studied.

Prerequisites: CPSC 150<sup>D</sup> or CPSC 246<sup>D</sup> or CPSC 217<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 427 - IT Capstone Project**

This Information Technology majors' course uses graphical user interface design concepts to introduce interface design possibilities.

This senior-level course requires students to produce an intricate interface that utilizes systems design, information management, systems administration and security, and programming concepts from lower-level courses. This course is intended as a capstone course that introduces human user interface theory and practice.

Prerequisite: CPSC 317<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 450 - Internship**

Professional work experience performed as an intern at selected agencies supervised both by the agency and by the Computer Science Department.

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 456 - Introduction to Computer Graphics**

This course introduces the basics of interactive computer graphics including software and hardware requirements for computer graphics systems, graphics data structures, algorithms and programming languages, raster and random display devices, and graphics applications. Students will work with dedicated graphics computers in completing laboratory exercises and course projects.

Prerequisite: CPSC 374<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 464 - Principles of Concurrent Programming and Operating Systems**

An introduction to operating systems with emphasis on fundamental principles. These include store management, processor management, file systems, and input/output. Laboratory exercises are assigned using a language that supports concurrency. Distributed and "real time" illustrations are used, as well as standard operating system illustrations.

Prerequisites: CPSC 370<sup>D</sup> and CPSC 374<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 466 - Compiler Design and Implementation**

This is an introduction to language translation. Topics include specification of languages and its relation to automata, lexical analysis, finite state machines, context free languages, LL and LR parsing methods, syntax directed translation, error recovery, code generation, and portability.

Prerequisites: CPSC 370<sup>D</sup> and CPSC 374<sup>D</sup> and CPSC 376<sup>D</sup> and CPSC 378<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 468 - Software Engineering and Project Management**

Software Engineering and Project Management deals with Software Development Life-Cycle Methodologies. SDLC methodologies consist of gathering requirements on, implementation, testing, documentation, deployment and maintenance of software. The software development life cycle (SDLC) is a framework defining tasks performed at each step in the software development process. SDLC is a structure followed by a development team within the software organization. It consists of a detailed plan describing how to develop, maintain and replace specific software. The life cycle defines a methodology for improving the quality of software and the overall development process. If the student takes CPSC 468 for the undergraduate program, he/she can take CPSC 668 for additional credits.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1 or Senior 2.

**CPSC 474 - Advanced Architecture & Parallel Computing**

This course will investigate the architecture and software models involved in parallel computing. We will explore both shared-memory and distributed-memory systems, along with the algorithms and languages involved in those systems.

Prerequisites: CPSC 370<sup>D</sup> and CPSC 374<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 476 - Artificial Intelligence**

A survey of artificial intelligence topics including heuristic programming, search techniques, knowledge representation, expert systems, vision and speech in automators, pattern recognition, and robotics.

Prerequisite: CPSC 374<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 478 - Analysis of Algorithms**

An advanced study of algorithms and data structures. Analysis of algorithms, space and time complexity, and the NP classes will be considered. Significant illustrative individual or group programming projects are required. Examples may be drawn from heuristic programming, encipherment, natural language processing, object code generation, combinatorial analysis, graphics, robotics, relational databases, or other algorithmic issues of current importance.

Prerequisite: CPSC 374<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 480 - Topics in Computer Science: Machine Learning**

This course provides an overview of concepts, techniques, algorithms and applications in machine learning, including supervised learning (e.g.: classification and regression), unsupervised learning (e.g.: clustering and dimensionality reduction), and learning theory (e.g.: bias/variance; regularization and feature selection). Moreover, the course will include research projects that will require writing computer code, conduction experiments, and writing papers. If the student takes CPSC 480 for the undergraduate program, he/she can take CPSC 680 for additional credits.

Prerequisite: CPSC 374<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 485 - Big Data Analytics**

This course covers the theoretical and practical fundamentals of Big Data. Students will learn the essentials of big data analytics including Big Data Characteristics, Management, Storage, Processing, and Analysis. The course is designed to involve hands-on experience with big data frameworks such as Hadoop MapReduce and Spark. If the student takes CPSC 485 for the undergraduate program, he/she can take CPSC 685 for additional credits.

Prerequisite: CPSC 405<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 488 - Software Engineering**

The course is the study of software engineering principles and design. The course will emphasize requirement analysis, design, testing, debugging and implementation of a semester long project. Students will work in groups for the project to be implemented. There will be multiple phases for the design and implementation of the project. The project will be implemented using a standard programming environment.

Prerequisite: CPSC 374<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 490 - Independent Study**

Supervised study in a special interest area. Prerequisites: Two computer science courses selected from 370 or above, permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CPSC 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Corporate Security (CSS)

**CSS 100 - Modern Security**

This course will explore the ever-changing security environment confronting domestic governments in securing its homeland, for-profit and non-profit organizations, and individuals. This course will discuss the history of security, the sub-topics of security, and whether insecurities can be eliminated, prevented, or merely managed. Students will apply risk assessment procedures, devise solutions to complex security issues, and weigh the strengths and weaknesses of those solutions. The student will be able to assess the complexity of solving modern day security problems when confronting economic limitations, policy and legal implications, and the feasibility of providing security to diverse populations.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

**CSS 120 - Introduction to Private Security**

This course will provide an overview of the private security field and the numerous complexities within it. Topics include but are not limited to an overview of private security, the basic goals and responsibilities of the industry, the challenges facing security, and various security systems for infrastructure, institutional and commercial organizations.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**CSS 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**CSS 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CSS 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. The course outline will be determined by the instructor based on key developments, trends or specialized content within homeland security. Permission of instructor.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**CSS 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CSS 210 - Physical Security**

This course discusses the methods, processes, and policies surrounding the security protection of the workplace. Students will study the historical roots of physical protection of assets, cultural contexts and interpretations of security efforts, as well as the way modern technology is changing the methods and focus of protection programs. The important elements of physical barriers, electronic controls and surveillance, and procedural efforts to secure assets will be examined. The role of the Security Manager in regulated workspaces will be discussed.

Prerequisite: CSS 120<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**CSS 240 - Security Management**

This course will examine the security department's role and function within an organization and the activities associated with operating and managing the department. This course will also look at how to manage various relationships security professionals encounter both internally and externally.

Prerequisite: CSS 120<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**CSS 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CSS 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. The course outline will be determined by the instructor based on key developments, trends or specialized content within homeland security. Permission of instructor.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**CSS 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CSS 300 - Personnel Security**

This course discusses the structures, processes, and regulations surrounding the security protection of people in the workplace. Students will study and weigh the advantages and legal restrictions of background checks as a condition of employment. Protection of workers in general, as well as programs to safeguard executives, workers in controversial industries/fields, and the design of policies and programs providing protection for workers with special issues outside the workplace will be examined. Defining, preventing and reacting to workplace violence will be explored.

Prerequisites: CSS 120<sup>D</sup> or HSS 120<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CSS 320 - Security Risk and Emergency Management**

This course will provide guidance how to conduct risk assessments, handle emergencies and develop and implement business contingency and disaster recovery plans. Students will learn how to develop and use risk surveys and other information gathering techniques, and design and implement controls by understanding cost/benefit analysis, crime prediction, response planning and business impact analysis.

Prerequisite: CSS 240<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CSS 351 - Fraud**

Approximately 5% of U.S. organizations annual revenues are lost to fraud each year. This course explores the historical and social problems created by fraud, the ethical and legal issues fraud presents to organizations and our economy; and the principles of fraud detection, examination, and prevention organizations employ to combat fraud in order to minimize both economic losses and a loss of jobs.

Credits: 3

Term(s) Typically Offered: Offered Fall, Winter, & Summer

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CSS 352 - Law & Ethics in the Workplace**

This course explores the historical, legal, ethical and practical implications of legal rights of workers in organizational relationships. This course will provide the historical evolution of protective legislation for workers and the continual refinement of common law to workers' rights. Ethical issues not addressed by the law will be explored as well as the importance of diversity in order to provide maximum growth for society and all individuals.

Credits: 3

Term(s) Typically Offered: Offered Winter, Spring&Summer

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**CSS 354 - Risk Assessment and Fraud Prevention**

Every level of today's organizations must make ethics and organizational integrity a priority. Controlling for risk and preventing fraud are critical skills leaders in every organization will be called upon to exercise. Focus must be placed on fraud prevention, internal controls, compliance with regulations and other risk exposure. Students will apply course concepts to their own disciplines.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CSS 360 - Specialized Fraud Schemes**

This course will examine specialized frauds such as identity theft, financial institution fraud, payment fraud, insurance fraud, healthcare fraud, contract and procurement fraud, tax fraud, and bankruptcy fraud. A thorough analysis of money laundering and its place in specialized fraud schemes will be reviewed. For each type of specialized fraud, we will explore the various types of fraud schemes within these specialized frauds and the controls that can be implemented to prevent or detect them.

Prerequisites: CSS 351<sup>D</sup> and ACCT 209<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in CERT - Fraud, Fraud or Organizational Security.

**CSS 370 - Fraud Law and Report Writing**

This course will examine both domestic and international laws surrounding fraud. We will discuss the special non-governmental agencies assisting in the fight against fraud domestically and worldwide and their recommended compliance guidelines. In this class we will also discuss how to write an effective fraud report for various audiences. Ethical responsibilities of a fraud examiner will also be examined.

Prerequisite: CSS 351<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Fraud.

**CSS 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CSS 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. The course outline will be determined by the instructor based on key developments, trends or specialized content within homeland security. Permission of instructor.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CSS 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CSS 420 - Fraud Examination**

This course will expose the student to an in-depth analysis of the fraud schemes perpetrated by those within and external to organizations. The elements of fraud schemes, the red flags associated with each scheme and how the scheme can be prevented and detected will be analyzed. This course will also emphasize financial statement fraud, and external fraud schemes from customers, vendors and unrelated third parties. Corporate espionage will also be covered.

Prerequisite: CSS 351<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Corporate Security.

**CSS 430 - Corporate Security Law**

This course will cover the pertinent security laws surrounding an investigation and developing a case for prosecution. It will also cover the various laws security professionals can breach while conducting security investigations.

Prerequisite: CSS 351<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Corporate Security, Fraud or Organizational Security.

**CSS 440 - Corporate Security Investigation**

This course will provide the fundamentals of corporate security investigations, the methods used in an investigation, how to build a case, apply investigative strategies, use investigative technology and write an effective report. The course will also emphasize the ethics, values and laws one must consider when conducting an effective investigation.

Prerequisite: CSS 351<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Corporate Security, Fraud or Organizational Security.

**CSS 450 - Internship**

Supervised placement and research in selected public and private agencies.

Credits: 3-9

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CSS 460 - Corporate Security Capstone**

Student will apply and demonstrate prior knowledge, skills and abilities to a major project which will be communicated both in written and oral forms. This course will cover current topics in corporate security and current global issues challenging security. A discussion of professional ethics, proper etiquette and interviewing skills, negotiation and conflict resolution skills will also be discussed.

Prerequisites: CSS 440<sup>C</sup> and CSS 430<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Corporate Security.

**CSS 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CSS 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. The course outline will be determined by the instructor based on key developments, trends or specialized content within homeland security. Permission of instructor.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CSS 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Counseling & Development (CDEV)

**CDEV 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**CDEV 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CDEV 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**CDEV 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CDEV 201 - Interpersonal and Group Dynamics**

Interpersonal behavior in small groups, with attention to group structure, individual factors, communication, and techniques. Treatment of leadership, group pressures, the effect of the group on personality, and group aims.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**CDEV 248 - Human Development and Education**

A study of the various stages of physical, intellectual, and emotional development, from pre-school age through adolescence, with reference to the effects upon the learning and educational process.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course

**CDEV 249 - Child Development**

A study of the various stages of development from conception to adolescence. Attention is directed to the physical, emotional, intellectual and social development of the child.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**CDEV 250 - Adolescent Psychology**

A study of the physical, mental and emotional development during the changes from childhood and the influence on attitudes and behavior of the age group in relation to the theories. Psychological principles are applied to the problems of family, community and school adjustment, as well as to the development of the persons.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**CDEV 251 - Mental Health in America**

What is mental health? How does American society view mental illness? What systems are there to support people who struggle with mental health concerns? Do these systems work? How and why does someone get diagnosed? This course will explore all these questions and more as students will explore mental health in the context of American society past and present with implications for the future. Current issues and trends in mental health and wellness will be explored including the current mental health system in America, advocacy for mental health issues and treatment, stigma in society related to mental health, how issues of diversity impact mental health and treatment, and how the topic of mental health impacts individuals and society.

Credits: 3

Thematic Thread(s): Citizenship & Social Problems, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

**CDEV 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CDEV 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**CDEV 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CDEV 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CDEV 395 - Undergraduate Workshops**

Special topics of interest to undergraduates and selected community members. A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CDEV 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CDEV 490 - Independent Study**

A program of independent work conducted by a student who has demonstrated academic proficiency. Prerequisite: Permission of the instructor, advisor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CDEV 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CDEV 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Criminology & Criminal Justice (CRIM)

**CRIM 105 - Human Diversity**

An orientation to living and working with diverse populations within modern American society, including examination of the strengths and stresses associated with diversities.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**CRIM 110 - Introduction to Criminology & Criminal Justice Systems**

This course covers the basic principles of the criminal justice system and criminological theory. Students will be introduced to policing, corrections, the criminal court process, legal procedures, and criminological theories, among other fundamentals of the criminology discipline.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Transfer Thread Completion Course

**CRIM 115 - Proseminar**

This is a writing intensive course that prepares criminology/criminal justice students for standard academic and professional expectations for the field. This class encompasses writing requirements and style for criminal justice and basic library research skills.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

Enrollment is limited to students with a program in Criminology & Criminal Justice or Criminology.

**CRIM 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**CRIM 170 - Crime: Why Do We Do It?**

This course examines different theoretical explanations of criminal behavior and how to test them using social science research methods. Further, the course explores how to translate these theories into public policy and draws attention to the interdisciplinary nature of the field of criminology.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**CRIM 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CRIM 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**CRIM 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CRIM 253 - American Policing**

This course covers the introductory elements of US policing and law enforcement. Topics of study include operations, legal aspects, ethics, diversity and other key issues.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**CRIM 263 - Introduction to Criminal Procedure**

This course covers the processes of criminal procedure. It includes landmark legal cases, search and seizure requirements, use of force, arrest, interrogation and court structures.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**CRIM 273 - American Corrections**

Examines the legally sanctioned methods of dealing with lawbreakers. The correctional methods studied will include institutional and community corrections, and the newer dispositions such as community service, restitution, and electronic monitoring. Current issues examined will include prison gangs, the problem of AIDS, women in prison, and prison privatization.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment is limited to students with a program in Criminology & Criminal Justice or Criminology.

**CRIM 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CRIM 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**CRIM 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**CRIM 301 - Theoretical Criminology**

A critical review of pure and applied theory within the field of criminology, including coverage of classical, biological, psychological, sociological, economic, political, and integrated theories of the causes of crime.

Prerequisite: CRIM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Criminology & Criminal Justice.

**CRIM 302 - Sexual Violence**

This course will explore multiple aspects of sexual violence including typologies and legal classifications of sex crimes, the motivations of offenders, victimology/trauma, studies of convicted rapists, social/cultural/media effects and context, and the criminal investigation of sex offenses.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

**CRIM 317 - Statistical Methods in Criminology and Criminal Justice**

This course is designed to introduce students to basic principles of probability theory, data analysis and data interpretation. Using SPSS, students will engage in basic data analysis, including descriptive and inferential statistics. More specifically, this course will cover univariate and bivariate measures, analyses of cross classified data, correlation, t-tests, analysis of variance, regression and related measures. Emphasis will be placed on how to use, interpret and understand some of the basic techniques used by criminal justice researchers and practitioners.

Prerequisite: CRIM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Criminology & Criminal Justice.

**CRIM 318 - Research Methods in Criminology and Criminal Justice**

This course is an introduction to criminological research that is intended to develop the student's research and analytical skills. Specifically, the course will focus on the theory of inquiry, research design, data gathering methods (surveys, secondary data and unobtrusive methods, field observation), evaluation research analysis, sampling and research reporting. Students will also learn how to use library resources as well as electronic resources.

Prerequisite: CRIM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Criminology & Criminal Justice.

**CRIM 321 - Criminal Justice interventions 1**

A review of basic theories, philosophies, methods, and skills that underlie successful community and correctional-based interventions with individuals serviced by the federal, state, and/or local criminal justice systems. Coverage will include the overrepresentation of minorities within the American correctional system and service provision to culturally diverse populations.

Prerequisites: CRIM 110<sup>D</sup> and CRIM 273<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Criminology & Criminal Justice.



**CRIM 322 - Criminal Justice Interventions 2**

A review of basic theories, philosophies, methods, and skills that underlie successful community and correctional-based interventions with an emphasis on groups and families serviced by the federal, state, and/or local criminal justice systems. Topic coverage also includes examining the overrepresentation of minorities under correctional supervision and service provision to culturally diverse populations.

Prerequisites: CRIM 110<sup>D</sup> and CRIM 273<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 326 - Victimology**

This course will present the student with a detailed understanding of the scope of victimology and the extent of criminal victimization by examining specific crimes types, the impact of crime on victims and society, the role of victims within the criminal justice system, specific remedies, and victim rights and services.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 327 - Criminal Justice and the Multicultural Community**

This course will examine current issues and social problems relating to the administration of justice in a culturally diverse society. The focus of the course will be on the changing ethnicity of communities and related changes in social and institutional public policy.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 328 - Transnational Crime & Justice**

This course focuses on the historical development and current status of various forms of transnational crime from the perspective of the international criminal justice community. This course explores the roots and operations of organized crime and how globalization has facilitated the emergence of transnational organized crime in the U.S. and in various regions throughout the world. Particular emphasis is given to issues of drug trafficking, illegal arms trade, money laundering, human trafficking and sex trafficking. This course also examines the current strategies for the containment and control of such activities.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 333 - Crime, Justice and Society**

An exploration of the major theories of crime with an emphasis of those contemporary theories that explore the relationship of race, gender, and crime. Topics may include prostitution, rape, hate crimes, and crimes against the gay community.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 343 - Criminal Investigations**

This course provides an introduction to criminal evidence and investigations. The topics include how evidence is collected and developed, the different types of evidence, the role of evidence in investigation, and basic investigative principles.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 345 - Juvenile Delinquency**

The behaviors of adolescents in modern societies have resulted in the need for society to exert various methods of social control. The reasons for these formal and informal control strategies are examined from a sociological view of institutional changes.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 360 - Police and Society**

This class examines the role of law enforcement and policing in contemporary society. This course also covers the history of policing, policing theory, police culture, different law enforcement agencies, and the social role of modern police agencies.

Prerequisite: CRIM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Criminology & Criminal Justice or Criminology.

**CRIM 368 - Comparative Criminal Justice Abroad**

This course examines similarities and differences between the United States' criminal justice system and another country's criminal justice system. The course requires a travel abroad activity that will include experiential learning regarding criminal justice components, such as police, courts, and corrections programs.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2 or Sophomore 2.

**CRIM 370 - Inside Out Views of Criminal Justice Issues**

This course creates a partnership between institutions of higher learning and correctional systems in order to deepen the conversation about criminal justice issues and transform our approaches to understanding crime, society's response to it, justice, inequality, and other issues of social concerns. This semester-long class brings together college students and incarcerated men or women to study as peers behind prison walls.

Prerequisite: CRIM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Criminology & Criminal Justice.

**CRIM 380 - Women & the Criminal Justice System**

This course will focus on theoretical and contemporary issues involving female practitioners, victims and offenders in the criminal justice system. Students will have the opportunity to become acquainted with and evaluate the political, legal and social issues of crime relating to women. This course will also examine diversity issues. More specifically, this course will examine how gender, race/ethnicity and class are related to the way they are treated in the criminal justice system in the U.S.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisite: CRIM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 402 - Forensic Behavior: Crime and the Individual**

This course explores aspects of mental illness, cognitions, psychopathology, mental disorders and other psychological aspects of criminal behavior and their relation to theories of crime. This is a cross-listed course that will fulfill either graduate or undergraduate credit.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**CRIM 404 - Applied Criminal Procedures**

This course addresses the history, legalities, trends and controversies in law adjudication as it pertains to issues of crime and justice. Students will examine the topics of criminal law, landmark cases, prosecution, defense, court procedures and decision-making and their interaction with our society.

Prerequisite: CRIM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 405 - White Collar Crime**

This course explores the complex issues surrounding white collar crime. In terms of white collar crime, the topics addressed may include: the complexities of defining it, theoretical explanations for it, the economical, physical and social costs that result from these types of crimes, and the issues the criminal justice system faces in trying to control it.

Prerequisite: CRIM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 408 - Capstone: Ethics and Criminal Justice**

This course examines the traditional schools of ethical thought and how they are applicable to the field of criminology, crime, and justice. Students will study formal works in ethics and morality and develop understanding of their role in the criminal justice professions as well as issues of crime, law, and society. This course is designed as a writing intensive course.

Prerequisite: CRIM 115<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with department of Criminology & Criminal Justice.

**CRIM 414 - Criminal Justice Policy**

This course explores the contemporary criminal justice system, major systems of social control and their policies and practices; as well as policies related to courts, victimology, juvenile justice and comparative criminal justice. These policies will be studied through the lenses of individual liberties, collective formalized controls, multicultural factors and issues related to race, gender and diversity.

Prerequisite: CRIM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Criminology & Criminal Justice.

**CRIM 416 - Community Corrections**

The course explores the origins of community corrections and its role in the American criminal justice system. Starting with pre-arrest diversion, the course covers the major issues and topics associated with community correction programs. Students are required to complete a service learning component.

Prerequisites: CRIM 110<sup>D</sup> and CRIM 273<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 422 - The Death Penalty**

An examination of the problems and issues related to the death penalty in the United States, including the history of capital punishment, important Supreme court decisions, how the various jurisdictions deal with capital cases, the comparative costs of incarceration and executions, miscarriages of justices in capital cases, the impact of minority status and how the criminal justice responds to these issues.

Prerequisite: CRIM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**CRIM 450 - Internship**

Supervised placement in selected professional agencies.

Credits: 1-12

Term(s) Typically Offered: Offered Every Term

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 468 - Crime & Media**

This course will examine images of crime and criminal justice as portrayed and presented by the mass media including popular media (fictional television show, music, novels, etc.) as well as "news" programming and print media. More specifically, the course will analyze how crime and criminals, and criminal justice systems (police, courts and corrections) are portrayed by the mass media. This course will analyze the media's relationship to criminological theories as well as to criminal justice policies and practices. This course will also examine how gender, race and class are related to the way crime is depicted in the mass media.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 490 - Independent Study**

Independent research under the guidance of a faculty member.

Prerequisite: Permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. (repeatable up to 6 credits) Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CRIM 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**CRIM 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisite: CRIM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

# Cybersecurity (CYBR)

## **CYBR 101 - Cybersecurity in the Era of Evolving Technology**

This course covers the fundamental concepts and design principles behind cybersecurity. This course will provide the students with the awareness, knowledge, opportunity and resources to develop the cybersecurity skills required for full participation as informed, responsible, ethical and productive citizens. Through research-oriented discussions and projects, the course will focus on security design, principles, ethics and models that all students should know and be able to apply independently when using technology, computing systems, digital media and information technology, including the internet.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Transfer Thread Completion Course, United Stated in Global Context

## **CYBR 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

## **CYBR 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## **CYBR 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

## **CYBR 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## **CYBR 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## **CYBR 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

## **CYBR 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## **CYBR 301 - Secure Programming**

This class will present the basic topics in computer security and their relationship to secure programming. A broad array of topics in secure software development will be covered such as the following: Security models, threats, design principles and secure coding practices. The course will cover programming language features and semantics to evaluate and to facilitate implementation of programs that are free from vulnerabilities. Additionally, different types of systems including web-based systems and some internals of OS kernel software testing and exploitation will be explored. Moreover, the software design patterns to built-in security during the architectural phase of the lifecycle will also be covered in detail.

Prerequisite: CPSC 246<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1 or Senior 2.

Enrollment limited to students in a Bachelor of Science degree.

## **CYBR 353 - Software Assurance**

This class will present a detailed description of software assurance practices, methods, and tools required throughout the software development life-cycle. The students will apply the development life-cycle processes and methodologies to explore common programming errors and to evaluate the common software testing tools.

Prerequisite: CPSC 246<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1 or Senior 2.

Enrollment limited to students in a Bachelor of Science degree.

**CYBR 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1, Freshman 2 or Sophomore 1.

**CYBR 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CYBR 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CYBR 401 - Software Security Analysis**

This course presents the tools and methods for analyzing software security. This course will focus on software penetration testing and will stress the critical aspects of software security testing in all phases of the software development life cycle with special emphasis on applications that are about to be deployed. An in-depth discussion on various security testing methods and tool vulnerabilities will be taught with hands-on demo of concepts during the class. Students will learn how to perform penetration testing in a practical way using well-established tools. The course will cover a wide range of topics such as web architecture, application infrastructure, reconnaissance, discovery, mapping, and exploitation.

Prerequisite: CYBR 353<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1 or Senior 2.

Enrollment limited to students in a Bachelor of Science degree.

**CYBR 471 - Malware Analysis**

This course covers foundational knowledge of discovering software vulnerabilities. The topics of reverse engineering and malware investigation will be presented in detail through the study of various cases and hand-on analysis of malware samples. It covers fundamental techniques that are used to analyze both source and binary code to equip the students with enough background knowledge for examining current threats and discussing the actions needed to prevent attackers from taking advantage of both known and unknown vulnerabilities.

Prerequisite: CYBR 401<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1 or Senior 2.

Enrollment limited to students in a Bachelor of Science degree.

**CYBR 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CYBR 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**CYBR 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Dance (DANC)

**DANC 101 - Wellness for Dancers**

The first component of this course will cover body conditioning methods, injury prevention and basic concepts of anatomy and kinesiology. Additionally this course may include, but not be limited to, nutrition, weight management, fitness and strength practices specific to the needs of the dancer. The second component of this course will cover time/stress management, study skills and an introductory approach to writing techniques and research methodologies. Students may be required to attend on-campus dance events and some may require a fee.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Dance.



**DANC 125 - Experiencing Dance: Techniques and Styles**

DANC 125 is an introduction to dance and movement techniques. It will focus on establishing a basic foundation in dance with emphasis on correct alignment, technique, and the unique stylistic components of a variety of dance genres. In this course, students will develop the ability to demonstrate and synthesize technical corrections, understand the elements of dance (space, time and energy), and perceive dance as an art form. This course may include dance genres such as Modern Dance, Jazz, Ballet, Improvisation, African-Based Dance, Social Dance, and dance-related practices such as Yoga and Pilates. In addition to the technical component of the course, students will examine the historic, cultural and social contexts in which these dance styles have been developed. DANC 125 is a blended course. The dance technique component takes place in the dance studio; the lecture/research/reading/writing component takes place online. This course may be repeated up to nine credits. Prerequisites and Notes: Students may be required to attend dance events and some may require a fee.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Transfer Thread Completion Course

**DANC 130 - Dance: Art and Culture**

Studying and experiencing the arts, including dance, music, theatre, and the visual arts, develops creative and aesthetic abilities. The arts introduce students not only to artists and their creations, but also to history, cultures, values, technique, imagination, creativity, and issues relevant to society. Students will gain an understanding of the creative process and how to analyze and interpret message and meaning in works of art. While the arts can bring us pleasure, they can also serve to enlighten and illuminate critical issues, lead to personal discoveries, and foster innovation in all fields. Students will learn to think critically about the arts, develop an appreciation for artistic creations, and by viewing live performances and exhibitions, become engaged audience members. Arts inquiry courses use and develop the analytic and interpretive modes of inquiry needed to understand and explore both tangible and abstract artistic works and the cultures in which they exist. In arts inquiry courses, students confront a variety of cultural and artistic expressions in order to gain an understanding of the human condition, and ultimately express their relationship to artistic work, meaning, and the creative process. Attendance at arts events will be required during this course and may require a fee.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**DANC 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**DANC 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**DANC 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**DANC 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**DANC 199 - LMA/Performance Techniques**

This course will focus on the theoretical and practical application of Laban Movement Analysis and dance performance skills. Students will be encouraged to explore the relationship between research, concept development and personal style through the performance of original solo choreography. Students may be required to attend on and off campus dance events; some may require of fee.

Prerequisites: DANC 200<sup>D</sup> and DANC 224<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment is limited to students with a program in Dance, Dance - Performance, Dance- Business Administration, Dance or Dance: Performance.

**DANC 200 - Dance Composition I**

This course will be an introduction to the elements of dance (space, time, and energy) and to the practice, theory, and art of dance composition. Experiences in solo and ensemble compositions will focus on improvisation, and lead to understanding content, aesthetics, creating, structuring, and ultimately choreography. Students will be required to attend certain dance events for this course; some may require a fee.

Prerequisite: DANC 224<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Enrollment limited to students with department of Dance.

**DANC 216 - Principles of Dance Production**

This course provides knowledge and practical hands-on experience in the many aspects of dance production and performance. A broad range of topics will prepare students for producing their work and collaborating with other artists and disciplines. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment is limited to students with a program in Dance, Dance - Performance, Dance- Business Administration, Dance or Dance: Performance.

**DANC 220 - Modern Dance Technique: Level II**

This second level course is a furthering and continuation of setting the foundation established in DANC 125, providing students with the information and the tools needed to extend technique, skills and performance quality. Course may be repeated for a maximum of 6 credits. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Dance.

**DANC 221 - Ballet II**

This course advances students' technical and performance foundation and will allow students to expand their knowledge of ballet technique and vocabulary. Students will examine, analyze and apply technical and performance concepts relative to classical ballet and its history. This course may be repeated for a maximum of 6 credits. Course content will be different each semester. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Dance.

**DANC 222 - Jazz Dance II**

This course advances students' foundational knowledge of jazz dance by improving and refining their skills in performance, technique, and stylistic approaches to the genre. In addition to experiencing several jazz dance movement styles, students will identify, define, and analyze key concepts of jazz dance. This course may be repeated for a total of 6 credits. Course content will be different each semester. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with department of Dance.

**DANC 223 - Creative Dance for Children**

The intellectual and artistic impact of Creative Dance for Children, in both academic and studio settings serves as the primary focus of this course. Laban-based movement principles will be explored through creative and improvisational experiences leading to lesson and unit plans in dance addressing a variety of academic areas suitable for use by classroom teachers and dance specialists. Students will gain an appreciation for dance as an art form and an understanding of how dance can address several academic disciplines most appropriate for inclusion in a grade K-5 curriculum. State and national dance standards will be addressed with additional experiences in lesson planning, pedagogy and peer teaching. Additionally, basic knowledge in anatomy and body mechanics, nutrition and wellness, and an awareness of safe/unsafe practices in the home, school and community will be provided. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course

**DANC 224 - Improvisation**

This course provides the student opportunities to explore the processes of discovering, creating and performing movement spontaneously through experimental practice, creative research, and writing. Course content will vary each semester. Students will be required to attend certain dance events for this course; some may require a fee. The course may be repeated for a maximum of 6 credits.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with department of Dance.

**DANC 271 - Dance Technology**

This hands-on course will explore the interactive possibilities between the live dancer and the projected image, as well as the temporal and spatial possibilities of dance on film. Students will direct, shoot and edit original video compositions using current technology, as well as perform in a multi-media work.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment is limited to students with a program in Dance, Dance - Performance, Dance- Business Administration, Dance or Dance: Performance.

**DANC 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**DANC 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**DANC 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with department of Dance.

**DANC 299 - Dance Rehearsal and Production**

This course provides dance majors and minors the opportunity to receive credit for the numerous hours spent in rehearsals and performances. Students will select specific activities and then develop a contract for completion of responsibilities and evaluation. Tasks may include choreographer, rehearsal assistant, rehearsal and performance as a dancer, publicity or as member of the technical support staff during performance (stage manager, running crew, usher, lighting). This course requires an audition and/or permission of the faculty member of record. Both 299 and 499 may be repeated up to 4 credits.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment is limited to students with a program in Dance, Dance - Performance, Dance- Business Administration, Dance or Dance: Performance.

**DANC 300 - Dance Composition II**

This second level of dance composition will include creating choreography based on specific forms of movement and music, emotion oriented and movement oriented dances, dances utilizing props and sets, and site-specific dance. Students will be required to attend certain dance events for this course; some may require a fee.

Prerequisite: DANC 200<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Enrollment is limited to students with a program in Dance, Dance - Performance, Dance- Business Administration, Dance or Dance: Performance.

**DANC 301 - Dances of Selected Cultures**

This course is an in-depth examination of dances from selected cultures, including but not limited to: Butoh, Classical Indian Dance, African Dance, Hula, Flamenco, Hip-hop or another cultural dance. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

Enrollment limited to students with department of Dance.

**DANC 305 - Society and Social Dance**

This course will examine the relationship between social dance and the social, political and cultural climate of the society in which the specific dance forms were created and performed. Emphasis will be placed on 20th century American social dance forms and styles. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Transfer Thread Completion Course

**DANC 318 - Dance in the Political World**

Through various critical lenses, this course analyzes the choreographic production of influential dance makers in a variety of geographic areas through the present day. This course is anchored on the term choreography and its multiple meanings, ranging from orchestrated movement performed on a proscenium stage to organized movements and actions of bodies in everyday life. This course is structured to permit the student to view dance through a variety of theoretical lenses. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Transfer Thread Completion Course, United States in Global Context

**DANC 320 - Modern Dance Technique: Level III**

This third level course requires the student with an established foundation in modern dance to extend their knowledge and acquire additional understanding of technical material and performance quality. Course may be repeated for a maximum of 6 credits. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1 may **not** enroll.

Enrollment limited to students with department of Dance.

**DANC 321 - Ballet III**

This course advances the competencies gained in DANC 221; movements and combinations increase in complexity and difficulty to further extend technique and performance ability. In addition to classical ballet, contemporary ballet vocabulary and aesthetics will be introduced, along with examining theories of classical and contemporary ballet. This course may be repeated for a maximum of 6 credits. Course content will be different each semester. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1 may **not** enroll.

Enrollment limited to students with department of Dance.

**DANC 322 - Jazz Dance III**

This course advances the competencies gained in DANC 222; movements combinations build in complexity and difficulty through experiencing a broad range of jazz dance periods and styles. Students will analyze the technique and choreography of key jazz dance figures and aesthetics within the larger jazz dance continuum. This course may be repeated for a total of 6 credits. Course content will be different each semester. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1 may **not** enroll.

Enrollment limited to students with department of Dance.

**DANC 323 - Teaching of Dance**

This course is designed to introduce students to the theory and practice of sound dance teaching and ethical teaching practices. Information on critical thinking, teaching and learning styles, imagery, diversity, and assessment will be explored. Students' abilities and strengths as teachers will be assessed and evaluated throughout the semester. This course must be taken with Field Experience, DANC 350, which allows the students to have practical teaching experiences. Students will be required to attend certain dance events for this course; some may require a fee.

Prerequisites: DANC 223<sup>D</sup> and DANC 350<sup>\*D</sup> and DANC 326<sup>D</sup> (may be taken concurrently).

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with department of Dance.

**DANC 324 - Music for Dance**

This course is designed to provide students with information regarding music for dance performance, production, and accompaniment. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1 or Freshman 2 may **not** enroll.

Enrollment is limited to students with a program in Dance, Dance - Performance, Dance- Business Administration, Dance or Dance: Performance.

**DANC 326 - Dance Kinesiology**

This course includes the study of human movement specific to dance, with emphasis on the anatomical principles and the laws of physics as they apply to dance technique and performance. The course includes structural and neuromuscular analyses including individual analysis of alignment, muscular imbalances, body types, conditioning needs and movement behavior. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Dance.

**DANC 350 - Field Experience in Dance Technique**

Field Experience provides the opportunity for students to teach in private studios, recreation centers and/or the public/private school systems. To be taken concurrently with DANC 323. Students will be required to attend certain dance events for this course; some may require a fee.

Prerequisites: DANC 223<sup>D</sup> and DANC 323<sup>\*D</sup> and DANC 326<sup>D</sup> (may be taken concurrently).

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with department of Dance.

**DANC 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**DANC 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**DANC 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**DANC 399 - Repertory**

This course provides students with an in-depth experience in an aspect of scholarly research, performance experience and/or creative process. This course may be repeated for a total of 6 credits. Course content will vary each semester the course is offered. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment is limited to students with a program in Dance, Dance - Performance, Dance- Business Administration, Dance or Dance: Performance.

**DANC 419 - Dance in Contemporary Times**

This course examines specific genres and historical developments in dance in the 20th and 21st centuries. The aesthetics and philosophies of leading dance artists will be explored. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Dance, Dance - Performance, Dance- Business Administration, Dance or Dance: Performance.

**DANC 420 - Modern Dance Technique: Level IV**

This fourth level course is for the student who demonstrates a strong technical foundation, and accurately performs dance movements and combinations consistently. Course may be repeated for a maximum of 6 credits. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Dance.

**DANC 421 - Ballet IV**

This fourth level pre-professional course advances the competencies gained in DANC 321 and is for the student who demonstrates a strong technical foundation and accurately performs both classical and contemporary ballet material with consistency while implementing artistic choices. Students will connect and evaluate their understanding of the history of ballet to contemporary issues. This course may be repeated for a maximum of 6 credits. Course content will be different each semester. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Dance.

**DANC 422 - Jazz Dance IV**

This fourth level pre-professional course advances the competencies gained in DANC 322 and is for the student who demonstrates a strong technical foundation and accurately performs a broad range of jazz dance styles and repertory with consistency, personal style, and implementing artistic choices. Students will analyze the political and social undercurrent of jazz dance in America. This course may be repeated for a total of 6 credits. Course content will be different each semester. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1 or Freshman 2 may **not** enroll.

Enrollment limited to students with department of Dance.

**DANC 424 - Contemporary Partnering**

This course investigates the techniques of Contact Improvisation to develop contemporary partnering. Students will be required to attend certain dance events for this course; some may require a fee.

Prerequisite: DANC 224<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms Even

Students with a semester level of Freshman 1 or Freshman 2 may **not** enroll.

Enrollment is limited to students with a program in Dance, Dance - Performance, Dance- Business Administration, Dance or Dance: Performance.

**DANC 425 - Senior Capstone I: Dance Research**

Advanced level research, writing, and discussions will lead to the development and presentation of the student's senior project. Readings and discussions on dance philosophy, aesthetics, leadership, and arts advocacy will be the basis of this course. Practical experiences in resume and grant writing, graduate school applications, interviews, and career planning will be covered.

Prerequisite: DANC 326<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2, Junior 1, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students in the BA 5153, BFA 5353, BFA 5354 or BFA 5355 programs.

**DANC 426 - Modern Dance Technique: Level V**

This fifth level course is for students who can demonstrate total integration of technique and performance, including sensitivity to aesthetic concepts. Students will focus on the following: a continual refinement and advancement in the level and knowledge of technique, quality of performance, and aesthetic concepts; a clear understanding of dance as a profession and demonstrated professionalism and maturity. Course may be repeated for a maximum of 6 credits. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Dance.

**DANC 428 - Modern Dance Technique: Level VI**

This sixth level modern dance course is for the student who can execute technique and performance at an advanced level and knows, understands, and can demonstrate dance theory and concepts. This course is for the dancer who is at the pre-professional level. Course may be repeated for a maximum of 6 credits. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 2

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with department of Dance.



**DANC 430 - BFA Capstone II: Performance, Choreography, and Entrepreneurship**

This BFA capstone course will include advanced-level research, writing, and discussions, and will lead to the development, production, and presentation of the student's senior project. The course will include practical, theoretical, philosophical, and artistic resources applicable to a professional career in dance or related field, and include an emphasis on the University's Student Learning Outcomes.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment limited to students in the BFA 5353, BFA 5354 or BFA 5355 programs.

**DANC 450 - Dance Internship**

Supervised placement and research in an appropriate agency. For further information, contact the Department of Dance. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-9

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Dance, Dance - Performance, Dance- Business Administration, Dance or Dance: Performance.

**DANC 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**DANC 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**DANC 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department. Students will be required to attend certain dance events for this course; some may require a fee.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Dance, Dance - Performance, Dance- Business Administration, Dance or Dance: Performance.

**DANC 499 - Dance Rehearsal and Production**

This course provides dance majors and minors the opportunity to receive credit for the numerous hours spent in rehearsals and performances. Students will select specific activities and then develop a contract for completion of responsibilities and evaluation. Tasks may include choreographer, rehearsal assistant, rehearsal and performance as a dancer, publicity or as member of the technical support staff during performance (stage manager, running crew, usher, lighting). This course requires an audition and/or permission of the faculty member of record. Both 299 and 499 may be repeated up to 4 credits.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with department of Dance.

## Economics (ECON)

**ECON 105 - Economics of Social Issues**

As an introductory course, it is intended to provide an understanding of how our economic system works. It examines the forces that determine what, how much and who obtains the outputs of the economy, and explains the issues behind current economic problems. A framework of building blocks from micro, macro, and international economics is developed to enable students to comprehend the differences among alternative solutions and to understand the implications of policy issues constantly confronting a mixed dynamic economy.

Credits: 3

Term(s) Typically Offered: Offered Winter, Spring&Summer

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course

**ECON 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**ECON 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ECON 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**ECON 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ECON 201 - Principles of Macroeconomics**

Definition of economics; concepts and institutions; demand, supply and the price system; national income; employment and fiscal policy; monetary policy; economic stability and growth.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

**ECON 202 - Principles of Microeconomics**

Economics of the firm; resource allocation; price and output determination; market structure; current economic problems; international economics.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

**ECON 211 - Real Estate Finance**

The study of nature and scope of real estate, factors affecting demand and supply, property rights, title, deeds and title closing, sources of financing, real estate valuation, taxes, leveraged buy-outs, and real estate investment decision.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**ECON 219 - Business Analytics I**

Probability and statistics in a business environment encompassing descriptive statistics, probability theory, hypothesis testing, linear regression and correlation. Prerequisites: Algebraic proficiency and microcomputer proficiency. Cross-listed as MGMT 219.

Credits: 3

Term(s) Typically Offered: Offered Every Term

**ECON 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ECON 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**ECON 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ECON 301 - Macroeconomic Analysis**

Determination of national income and employment. National income accounts as measures of aggregate economic behavior. Analysis of income stability, unemployment, inflation and growth.

Prerequisites: ECON 201<sup>D</sup> and ECON 202<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ECON 302 - Microeconomic Analysis**

Intermediate price theory including theories of demand, supply, production, resource allocation, market structure, general equilibrium and risk analysis.

Prerequisites: ECON 201<sup>D</sup> and ECON 202<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ECON 304 - Money and Banking**

Emphasis is upon monetary policy, how it is implemented, the theories on which it is based, and the implication of this policy on our economy.

Prerequisite: ECON 201<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ECON 312 - Critical Choices in Health Care Policy**

This course analyzes the health care sector. It presents reasons for the growth in health care expenses, assesses how and why they are likely to grow, and details policy options that confront health care administrators, consumers, employers, and government officials.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ECON 315 - Economics of Sustainable Development**

Economic causes and effects of pollution are discussed along with the issue of sustainable economic development. government policy with respect to the environment and renewable energy will be surveyed. The framework connection between sustainability and the core functions of business for profit in the global economy will be presented.

Prerequisite: ECON 202<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ECON 318 - Introduction to Econometrics**

Economic and statistical analysis encompassing multiple regression methods, economic and statistical decision analysis, and advanced forecasting techniques.

Prerequisites: ECON 219<sup>D</sup> or MGMT 219<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ECON 319 - Business Analytics II**

This course introduces various methods on how to analyze large sets of business data in order to uncover potential business opportunities. Students will learn both predictive analytics and prescriptive analytics. The predictive analytics include trend analysis, forecasting techniques, data mining, and spreadsheet modeling. Prescriptive analytics covers linear optimization and decision analysis. Business software such as productivity software, data visualization, and business intelligence software will be heavily used as a main focus of learning.

Prerequisites: (ECON 219<sup>D</sup> or MGMT 219<sup>D</sup> or STAT 152<sup>D</sup>) and (MATH 113<sup>D</sup> or MATH 115<sup>D</sup> or MATH 117<sup>D</sup> or MATH 118<sup>D</sup> or MATH 122<sup>D</sup> or MATH 123<sup>D</sup> or MATH 125<sup>D</sup> or MATH 131<sup>D</sup> or MATH 210<sup>D</sup> or MATH 225<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

**ECON 324 - Game Theory, Behavioral and Experimental Economics**

This is an upper division undergraduate course, focused on Behavioral Economics, Game Theory and Experimental Economics. Behavioral economics and experimental economics are relatively new fields in which decision making is examined in a controlled laboratory/field setting. The data from these experiments are used to evaluate theories as well as to test and fine tune policies that could not be easily tested with naturally occurring data. The range of applications for experimental research is broad (and growing) and includes fields such as behavioral economics, public economics, industrial organization and regulation, environmental economics, game theory, and bargaining. This course surveys research in many of these fields and provides a basic framework for designing and conducting experiments. In this sense the course fulfills two objectives: to encourage students to think about the empirical and policy implications of the economic theories taught in other classes and to teach skills that may be used to conduct empirical analysis (using laboratory and field experiments data).

Prerequisite: ECON 202<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

**ECON 326 - International Economics**

Alternative exchange rate systems, commercial trade policies, balance of payments, adjustment mechanisms and the role of international financial organizations.

Prerequisites: ECON 201<sup>D</sup> and ECON 202<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ECON 360 - Labor Economics**

An investigation of labor markets and the effect of institutional forces on employment, wage determination, stability, and the availability of labor.

Prerequisite: ECON 202<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ECON 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ECON 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ECON 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ECON 450 - Internship**

Supervised placement and research in selected public and private agencies at appropriate institutions. Course can be taken for 1-12 credits, 3 credits are recommended.

Prerequisites: ECON 201<sup>D</sup> and ECON 202<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-12

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ECON 490 - Independent Study**

In-depth reading and/or research in an area of particular interest to the student, with the guidance of a faculty member. Prerequisites: 12 hours of major courses, application, and permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ECON 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ECON 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Elementary Education/Early Childhood (ELEC)

**ELEC 100 - Early Childhood Education Theory & Practice**

This course is designed to introduce students to early childhood education with emphasis on historical and contemporary perspectives, theories, practice and current trends and developments. Early childhood environments for children from birth through nine years of age will be studied and various curricula materials will be reviewed. Examination of the student's personal qualities in relationship to expectations of the field is addressed throughout the course (COE assessment of dispositions). Students will be exposed to children within a variety of early childhood settings via videotaped observations of children and classrooms.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Transfer Thread Completion Course

**ELEC 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**ELEC 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ELEC 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**ELEC 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ELEC 200 - Child Development Typical**

This course will provide a critical overview of key aspects of child development (physical, psychosocial, and cognitive) from theories and research that span conception to the early school years (birth to age 9). Important contexts that shape children's development will also be a major focus of this course, such as family, school, community, socioeconomic, and policy influences.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Transfer Thread Completion Course

**ELEC 230 - Field-Based Child Development Typical**

Candidates will connect theory to practice in this course. Both typical and atypical child development will be studied in-depth through observations in a variety of education and education-related settings for children birth through grade four.

Prerequisites: ELEC 100<sup>D</sup> and ELEC 200<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): ELEC 237 and ELEC 281

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1 or Freshman 2 may **not** enroll.

Enrollment limited to students in the College of Education college.

**ELEC 237 - ELL Strategies and Practice for Early Childhood Education**

This course will focus on the development of competencies and skills needed to effectively teach students whose first language is not English so that teacher candidates can accommodate and adapt instruction and assessments for Pre-K through Grade 4 English Language Learners (ELLs). In addition, this course is designed to provide pre-service early childhood educators with the scientific study of psycholinguistic phenomena in the study of language acquisition, to understand development of typical and atypical oral language in young children from birth to age 9, and to understand cultural and familial influences on language and literacy.

Prerequisites: ELEC 100<sup>D</sup> and ELEC 200<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): ELEC 230 and ELEC 281

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1 or Freshman 2 may **not** enroll.

**ELEC 238 - Literacy Practices for the Emergent Learner, PK-1**

Through a blend of theory and practice, this course explores research-based instruction for the emergent literacy learner (PreK-grade 1), including the relationship between language development and literacy, instructional activities to help children become competent users of oral language, reading and writing processes, creation of a literate environment, and cultural and familial influences on language and literacy.

Prerequisites: ELEC 100<sup>D</sup> and ELEC 200<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): ELEC 285

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**ELEC 281 - Family and Community Diversity and Partnerships**

This course is designed to acquaint the teacher candidate in early childhood education to the theories, practices, skills, and knowledge of home, school, and community relationships, building towards home and school partnerships. The focus of this course is developing a thorough understanding of diverse contexts and ethnicities that helps educators of young children strengthen the bonds between home, school and community.

Prerequisites: ELEC 100<sup>D</sup> and ELEC 200<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): ELEC 230 and ELEC 237

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms



**ELEC 285 - Integrating Creative Expression through the Arts**

This course will identify basic elements, principals, related concepts, and vocabulary of the creative and performing arts. The creative arts exist as vehicles through which we can communicate the very essence of expressive language. Students will be introduced to various media, lesson planning, and ways of integrating the arts into planning academic and multicultural curricula for PreK-4 classrooms. This course will serve as a foundation for integrating arts across the curriculum.

Prerequisites: ELEC 100<sup>D</sup> and ELEC 200<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): ELEC 238

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**ELEC 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ELEC 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**ELEC 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ELEC 301 - Math/Science Teaching Lab**

Provides students with a myriad of opportunities to: identify and develop basic teaching skills, design and implement math and science lessons for peers and school-aged children, and reflect/analyze lessons in light of science and math education research findings. Throughout the course, candidates will have the opportunity to actually experience classroom teaching when possible.

Prerequisites: ELEC 281<sup>D</sup> and (ELEC 288<sup>D</sup> or ELEC 304<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): ELEC 342

Credits: 1

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 306 - Early Childhood Education I**

Research, history, philosophy, current trends and observations with emphasis on the nature and nurture of the young child from birth through third grade.

Prerequisites: ELEC 200 (may be taken concurrently)<sup>D</sup> and ELEC 248<sup>\*D</sup> and CDEV 342 (may be taken concurrently)<sup>D</sup> (may be taken concurrently).

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 308 - Folk Literature and Storytelling**

Combines a study of traditional literature with practice in the best methods of presenting it orally. Oral presentations include a preschool story hour, folk tale, and myth or literary fairy tale. The course also emphasizes the importance of puppetry in education and recreation.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 311 - Mathematics & Literacy Teaching Lab Pre K - 4**

This course provides teacher education candidates with an opportunity to observe, assist, and teach mathematics and literacy lessons in a pre-school or early childhood grade level setting. Through this lab, candidates identify and develop basic teaching skills, design and implement mathematics and literacy lessons for PK-Grade 4 children, and reflect and analyze on lessons taught, based on assessment data, research and philosophies examined concurrently in the mathematics and literacy methods courses. Candidates will also develop an appreciation for the many tasks teachers perform daily.

Corequisite(s): ELEC 316

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 316 - Developmental Formal and Informal Assessments**

A study of assessment for children from birth to Grade 4. Both formal and informal instruments will be discussed with the emphasis on tools that can be used by teachers of young children to inform developmentally appropriate instruction and practices on a daily basis. Considerations in choosing, administering, and reporting results of assessments will also be addressed.

Corequisite(s): ELEC 330

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 317 - Child and Family Development in Early Childhood**

This course is a theoretical, in-depth examination of physical, intellectual, social-emotional, language and family development from birth through age 8, which builds upon previous Human Development courses. Development is viewed as occurring within a family and a culture, not in isolation. Emphasis is placed upon the connections between the theoretical and the practical.

Prerequisites: CDEV 248<sup>D</sup> and ELEC 306<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 320 - Elementary Field Experience**

Candidates enroll as part of the Professional Block in Elementary Education. This course involves an in-depth teaching experience in an elementary classroom in which opportunities are provided for the application of content knowledge, pedagogical skills, and the assessment of children's learning. Grading P/NC/Fail.

Prerequisites: ELEC 301<sup>P</sup> and ELEC 342<sup>D</sup> and ELEC 362<sup>D</sup>

<sup>P</sup> Requires minimum grade of P.

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): ELEC 332

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 324 - Methods for Teaching English as a Second Language and Bilingual Education**

A course designed to acquaint the prospective teacher at any level with the methodology used to teach English to native speakers of other languages and to acquaint students with the specialized procedures used when teaching in bilingual classrooms (any two languages) on any level.

Prerequisites: ELEC 200<sup>D</sup> and (CDEV 248<sup>D</sup> or CDEV 342<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 325 - Children's Literature**

This course introduces the children's literature: the history, the authors and illustrators, and the readers. A major focus is on diversity in books for children and how different cultures, experiences, time periods and characters are represented, or excluded. Emphasis is placed on critical analysis and discussion of books and illustrations, with a focus on elements of literature and art. Children as readers is also a focus, exploring ways that literature is used in classrooms and families.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Early Childhood Ed (PK-4), Early Child/Spec Ed(PK-4)PK-8) or Early Childhood Education.

**ELEC 327 - Social/Cultural Studies in Early Childhood Education**

This course is a multi-dimensional methods course which integrates background knowledge from the social sciences, natural sciences, and the humanities and fine arts. It focuses on an experiential approach to facilitating young children's growth and development, with an emphasis on human relationships. A multi-cultural perspective is fostered.

Prerequisites: (ELEC 306<sup>D</sup> or ELEC 396<sup>D</sup>) and CDEV 248<sup>D</sup> and ELEC 200<sup>D</sup> and SEFE 342<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): ELEC 397

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 328 - Curriculum and Assessment in ESL Education**

This course prepares students seeking Pennsylvania certification in English as a second language (K-12) with key concepts related to curriculum development and assessment for students learning English as a second language. Topics include meeting ESL curriculum standards, novel and accurate assessment procedures, culturally biased testing, assessment suitability criteria, and culturally appropriate testing situations. The course investigates assessment within the context of ESL curriculum design, implementation, and program evaluation. Finally, students will come to terms with the process of evaluating language minority students in relation to diagnosis, placement, formal and informal assessment, exiting, and monitoring of student progress.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 330 - Literacy Practices for the Developing Learner, Grades 2 - 4**

Candidates will acquire a thorough understanding of literacy development (ages 5 - 9) as revealed in learning and motivation theories.

Candidates will be prepared to use a variety of instructional strategies and materials selectively, appropriately, and flexibly. Candidates will be prepared to use multiple strategies for developing students' word/concept knowledge and word analysis skills in addition to understanding how word meaning and fluency support comprehension. Candidates will be able to teach multiple comprehension strategies that support readers in constructing meaning from text, both literary and informational, and in monitoring their comprehension. Candidates will gain strategies for infusing writing and the conventions of writing into literacy learning. Candidates will acquire appropriate assessment techniques to support responsive instructional decision making and reflection. Competencies and skills needed to effectively support students whose first language is not English will be central to this course.

Corequisite(s): ELEC 340

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 332 - The Teaching of Elementary Reading**

Candidates will be introduced, through theory and practice, to a variety of strategies for teaching elementary reading. Candidates will become aware of ways to assess reading progress and ways to support children as they develop as readers. Candidates will also become familiar with materials used in the classroom to support literacy.

Prerequisites: ELEC 301<sup>P</sup> and ELEC 342<sup>D</sup> and ELEC 362<sup>D</sup>

<sup>P</sup> Requires minimum grade of P.

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): ELEC 320

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 340 - Mathematics Methods and Strategies for PRE K - 4 Teachers**

This course is designed to provide pre-service teachers with the pedagogy and materials necessary for teaching early childhood mathematics. This course addresses development and instruction in play-based and problem-based mathematics in pre-K to grade 4 settings.

Included are methods, materials, and research findings related to teaching of mathematics. Questions that provide the structure for this course are: What is the nature of mathematics (what is mathematics and what does it mean to do mathematics)? How do children learn mathematics? How do we as teachers help children learn mathematics?

Corequisite(s): SPED 350

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

Enrollment limited to students in the College of Education college.

**ELEC 342 - The Teaching of Elementary Mathematics**

The various processes and operations needed to effectively teach mathematics in the elementary school are carefully analyzed. Candidates recognize and can address the mathematical concepts and the potential misconceptions and misunderstandings of these concepts by school-aged children.

Prerequisites: MATH 210<sup>D</sup> and MATH 310<sup>D</sup> and SEFE 270 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): ELEC 362

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 347 - Modern Primary Programs**

A survey of philosophy, techniques and methodology used in educating children through continuous progress in an ungraded primary school.

Prerequisites: ELEC 306<sup>D</sup> or ELEC 396<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 348 - Leadership, Advocacy & Program Development**

This course will focus on leadership, advocacy and program development for teacher candidates preparing to work with children Pre-K to Grade 4. Focus will be on the design, development, and evaluation of early childhood programs, including theory, paradigms and models, policy in the program development process, and the use of technology in program development. In addition, this course will include theory, research and practice in early childhood as a foundation for leadership in the field and advocacy on behalf of young children, families, communities, and the early childhood profession. An examination of current issues in the field and strategies for articulating positions and for working toward change will also be addressed.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 352 - The Teaching of Language Arts**

Candidates will be introduced, through theory and practice, to a variety of strategies for teaching elementary language arts. They will become familiar with the six components of language arts: reading, writing, speaking, listening, visually representing, and viewing. Candidates will learn strategies for teaching these components and integrating them into the classroom curriculum. Candidates will also become familiar with assessment tools for language arts.

Prerequisites: ELEC 301<sup>P</sup> and ELEC 342<sup>D</sup> and ELEC 362<sup>D</sup>

<sup>P</sup> Requires minimum grade of P.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 362 - The Teaching of Elementary Science**

Candidates will learn numerous strategies which engage students in the science inquiry process by connecting scientific understanding and contemporary teaching and assessment practices. Locating and adapting appropriate activity-based science lessons are important components of this course.

Corequisite(s): ELEC 301

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 372 - The Teaching of Elementary Social Studies**

Candidates in this course will explore the social studies curriculum, including its organization; analyze methods of teaching, objectives, and materials; and discuss evaluation/assessment techniques. Study focuses on best practice classroom applications and the relationship between instruction and student learning outcome. Field experiences included.

Prerequisites: ELEC 301<sup>P</sup> and ELEC 342<sup>D</sup> and ELEC 362<sup>D</sup>

<sup>P</sup> Requires minimum grade of P.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 382 - Literacy Assessment**

A study of literacy assessment techniques designed to support the elementary teacher in designing a supportive literacy environment and effective literacy instruction for all students.

Prerequisites: ELEC 332<sup>D</sup> and SEFE 200<sup>D</sup> and CDEV 248<sup>D</sup> and CDEV 342<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 385 - Creativity**

An interdisciplinary approach to child-centered teaching through creative instructional materials, drama, music, and a variety of art media.

Prerequisites: SEFE 200 (may be taken concurrently)<sup>D</sup> and (SEFE 248 (may be taken concurrently)<sup>D</sup> or CDEV 248<sup>D</sup>) and (SEFE 342 (may be taken concurrently)<sup>D</sup> or CDEV 342<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 397 - Early Childhood Education II**

Curriculum, materials, audio-visual and other aids and their implementation in various early childhood learning situations with full articulation of such programs with the primary grades.

Prerequisites: (ELEC 306<sup>D</sup> or ELEC 396<sup>D</sup>) and CDEV 248<sup>D</sup> and SEFE 342<sup>D</sup> and SEFE 200<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): ELEC 327

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 405 - Overview of and Immersion in Global Education**

The course focuses on global education and an immersive experience in a mediated field experience abroad. Students will develop awareness and skills needed to teach in a culturally responsive classroom. Educational systems from various countries will be explored with a focus on the country of the mediated field experience.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Transfer Thread Completion Course

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**ELEC 407 - Math and Science in Early Childhood Learning**

Students will apply theories of child development to the implementation of math and science in the early childhood curriculum. Using a constructivist approach, students will plan and implement activities designed to enhance cognitive development in these areas. Students will become aware of available materials for teaching and assessment.

Prerequisites: (ELEC 327<sup>D</sup> or ELEC 278<sup>D</sup>) and (ELEC 337<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 410 - Culture and Politics of American Education**

Public education (Pre-K-12) in the United States is one of the most important civic debates in our society. Everyone has attended school and everyone seems to have an opinion about what counts as a quality education. The problem of how to provide an education to the youth of this country requires thoughtful decisions-informed by scholarly research, multiple viewpoints and ethical perspectives. This course will provide students the opportunity to explore the cultural, political and legal issues facing public education today.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Cultural Literacy & Community Building, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**ELEC 415 - Early Science and Math**

Students will apply theories of child development to the implementation of math and science in the early childhood curriculum. Using a constructivist approach, students will plan and implement activities designed to enhance cognitive development in these areas. Students will become aware of available materials for teaching and assessment.

Credits: 4

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

**ELEC 420 - Early Childhood Field Experience**

Candidates enroll as part of the Professional Block in Early childhood Education. This course involves an in-depth teaching experience in an early childhood setting in which opportunities are provided for the application of content knowledge, pedagogical skills, and the assessment of children's learning.

Prerequisites: ELEC 330<sup>D</sup> and ELEC 340<sup>D</sup> and ELEC 311<sup>P</sup> and ELEC 316<sup>D</sup> and (SPED 325<sup>D</sup> or SPED 350<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

<sup>P</sup> Requires minimum grade of P.

Corequisite(s): ELEC 480

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 427 - Early Intervention**

This course will examine atypical development from birth through age eight. Legal rights of children and families will be explored. Student will study the interventions necessary to assist the young child and their families adjust and adapt to development difficulties. A field component is included.

Prerequisites: ELEC 327<sup>D</sup> and (ELEC 337<sup>D</sup> or ELEC 278<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 437 - Assessment in Early Childhood**

This course is an overview of the role of assessment at the preschool and primary grade levels as integral to curriculum and instructional decision-making. Content will focus on informal assessment measures recommended for early childhood classroom teachers. A field experience gives students the opportunity to apply a variety of assessment measures with young children.

Prerequisites: ELEC 427<sup>D</sup> and (ELEC 447<sup>D</sup> or ELEC 420<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 440 - ECE Curriculum Integration: Theory into Practice**

Development and implementation of an integrated program of all content areas across the learning standards Pre-K through Grade 4, through the integration of play-based, experience-based, and project-based teaching. Selection and development of materials and resources based on assessment data that meet the needs of culturally and linguistically diverse learners is stressed.

Prerequisites: ELEC 311<sup>D</sup> and ELEC 330<sup>D</sup> and ELEC 340<sup>D</sup> and ELEC 316<sup>D</sup> and SPED 325<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 445 - Administration of Child Care Programs**

Students are introduced in a practical manner to the procedures required to organize, license, and administer a child care program (including preschool and elementary aged children). This course involves a field experience of 5 hours.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 450 - Internship: Early Childhood**

This course is a supervised off-campus, full-time work experience in a certified Early Childhood Education program. Students attend seminars and complete additional assignments made by supervisors. Open only to Elementary Education: Early Learning and Development students.

Prerequisites: ELEC 447<sup>D</sup> or ELEC 420<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**ELEC 455 - Student Teaching: Early Childhood**

Under the guidance of a cooperating teacher and university supervisor, candidates engage in teaching assignments on a full-time basis in specified school districts and/or early childhood agencies and attend scheduled seminars. Student teaching requires a partnership between the university and cooperating school districts and agencies. It is considered the culminating experience and the most beneficial teacher preparation course. It is a transition between pre-service and in-service teaching. Must meet all requirements to enroll in student teaching, including, but not limited to, required Praxis exams, grade point average, clearances, required courses and field experiences.

Credits: 1-12

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 460 - Instructional Strategies for Science and Technology**

This course is designed to introduce the teaching techniques and strategies used by science educators to make science teaching, meaningful, motivating, and plausible for PK-4 students. In addition, the most common curriculum units and supplements are introduced, explored, and examined for their appropriateness in the early childhood environment and the relationship to the PDE science standards. Emphasis is placed on how to collect and learn about scientific concepts in order to develop the skills necessary to teach coherent centers and/or lessons and choose instructional techniques that will most effectively help children learn. Lastly, confidence in teaching science is established as participants devise, employ, and assess science lessons presented to peers and young children.

Prerequisites: ELEC 311<sup>D</sup> and ELEC 330<sup>D</sup> and ELEC 340<sup>D</sup> and ELEC 316<sup>D</sup> and (SPED 325<sup>D</sup> or SPED 350<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): ELEC 470

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 470 - Social Studies & Citizenship**

Teacher candidates in this course will explore the social studies curriculum, including its organization; analyze methods of teaching, objectives, and materials; discuss evaluation/assessment techniques and citizenship development for PK-4 learners. Study focuses on best practice classroom applications and the relationship between instruction and student learning outcome.

Prerequisites: ELEC 311<sup>D</sup> and ELEC 330<sup>D</sup> and ELEC 340<sup>D</sup> and ELEC 316<sup>D</sup> and (SPED 325<sup>D</sup> or SPED 350<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): SPED 360

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 475 - International Student Teaching: Early Childhood**

Under the guidance of a cooperating teacher and university supervisor, candidates engage in teaching assignments on a full-time basis in specified school districts and/or early childhood agencies and attend scheduled seminars. Student teaching requires a partnership between the university and cooperating school districts and agencies. It is considered the culminating experience and the most beneficial teacher preparation course. It is a transition between pre-service and in-service teaching. This course is specially designed for those students participating in the international student teaching experience.

Credits: 1-12

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment limited to students in a B.S. in Education degree.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

Enrollment limited to students in the College of Education college.

**ELEC 480 - Assessment for Differentiation of Literacy Instruction**

The purpose of this course is to provide teacher candidates with information and experiences that will enable them to utilize formal and informal methods for assessing children's reading ability and materials for improving decoding, fluency, vocabulary, comprehension and motivation. This course we explore the various roles of assessment in education and will look at a variety of data sets to draw conclusions about how they might impact class- or school-level decision making.

This course will also provide teacher candidates with information to differentiate their teaching to meet the needs of all learners.

Prerequisites: ELEC 238<sup>D</sup> and ELEC 330<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): ELEC 460

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**ELEC 490 - Independent Study**

A program of independent work conducted by a student who has demonstrated academic proficiency, with prior approval of the student's advisor and departmental chairperson. Prerequisite: Permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ELEC 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisites: SEFE 200<sup>D</sup> and CDEV 248<sup>D</sup> and CDEV 342<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Engineering (ENGR)

**ENGR 110 - Introduction to Engineering**

The first in a two-semester course sequence aiming to provide students with an introduction to engineering, design process, and tools needed in the engineering professions. This course introduces students to the different disciplines of engineering, professional and ethical aspects of engineering, teamwork, engineering design process and problem solving, and various computer applications.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms

**ENGR 120 - Engineering Design Tools**

This is the second in a two-semester course sequence aiming to provide students with an introduction to engineering, design process, and tools needed in the engineering professions. This course focuses on the design process, introduction to engineering computing tools, engineering graphics using a Computer Aided Design (CAD) software platform, and 3D printing. Students will learn the basic tools and techniques used in engineering design and problem solving.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

**ENGR 130 - Engineering Computing Tools**

This course provides students with computing skills required in engineering. Course content includes structured programming, engineering problems and open-ended design projects, which are solved in teams with results professionally presented.

Credits: 2

Term(s) Typically Offered: Offered Fall & Spring Terms

**ENGR 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**ENGR 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ENGR 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**ENGR 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ENGR 210 - Statics**

Includes the application of equilibrium conditions to structures, trusses, frames and machines, and beams with concentrated and distributed loads.

Prerequisites: PHYS 216<sup>D</sup> and MATH 230 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**ENGR 220 - Engineering Materials**

This course covers the properties and uses of typical materials used in various engineering professions, their manufacturing processes, and an introduction to mechanical testing methods.

Prerequisite: CHEM 107<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**ENGR 230 - Mechanics of Materials**

This course provides a review of the basic mechanical properties of the solids with lab. Topics covered will include deformation and failure of solid bodies under the action of forces, stress- strain, Mohr's circle, generalized Hooke's Law, axial bending and buckling.

Prerequisites: ENGR 210<sup>D</sup> or PHYS 314<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**ENGR 231 - Mechanics of Materials Lab**

A laboratory course to accompany ENGR 230 Mechanics of Materials. Laboratory experiments are designed to introduce experimental techniques common to structural engineering, interpretation of experimental data, comparison of measurements to numerical/analytical predictions, and formal, engineering report writing.

Prerequisite: ENGR 230 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

**ENGR 240 - Dynamics**

Integrates the subject content of kinematics and kinetics that deal respectively with the description of motion of bodies and the causes for their motion.

Prerequisites: PHYS 314<sup>D</sup> or ENGR 210<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**ENGR 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ENGR 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**ENGR 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ENGR 301 - Fluid Mechanics**

This course provides an overview of fluid statics and dynamics concepts. Topics covered will include fluid statics, laminar and turbulent flow of compressible and incompressible fluids, flow measurements, open channel flow and kinetics of fluids.

Prerequisites: ENGR 210<sup>D</sup> and MATH 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGR 310 - Introduction to Electrical Engineering**

This course provides a review of the basic concepts in electrical engineering. Topics covered will include electrical engineering units, circuit elements, circuit laws, measurement principles, mesh and node equations, network theorems, operational amplifier circuits, energy storage elements, sinusoids and phasors, sinusoidal steady state analysis, average and RMS values, complex power.

Prerequisites: PHYS 212<sup>D</sup> or PHYS 217<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Freshman 1, Freshman 2 or Sophomore 1.

**ENGR 320 - Thermodynamics**

This course provides a detailed review of the basic thermodynamic principles. Topics covered will include properties of ideal gases and vapors; first and second laws of thermodynamics; basic gas and vapor cycles; basic refrigeration.

Prerequisite: PHYS 217<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGR 340 - Engineering Economics**

This course covers the concepts of cash flow, cash flow equivalence, cash flow before taxes, depreciation and depletion, cash flows after taxes, profits, evaluation of alternatives, financial statements and multidisciplinary team project.

Prerequisite: MATH 225<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGR 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Graduate.

**ENGR 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGR 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGR 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGR 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGR 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## English (ENGL)

**ENGL 101 - Introduction to College Writing**

In this course, students will investigate the purposes, both academic and non-academic, for writing and reading. Students will learn to identify meaning and draw inferences from context cues. They will develop increased writing fluency, clarity, and coherence; a fuller understanding of rhetorical principles, including invention, organization, and audience; improved strategies for revising and editing their prose, emphasizing the standards of edited American English; and an understanding of writing and reading as tools for learning and communication. Students should take this course before taking 102 by advisement, by their own choice, or if any one of the following applies to them: if the SAT Verbal score is 399 or less, if the SAT Writing score is 399 or less, or if the ACT Writing score is 11 or less.

Credits: 3

**ENGL 102 - Critical Writing**

Students will develop an understanding of rhetorical principles, including invention, organization, and audience, along with strategies for revising and editing their prose that emphasize clarity, coherence, and support. They will learn to develop positions on selected issues and questions and compose strongly supported and reasoned arguments regarding those issues and questions. Finally, they will learn basic information literacy skills, which will include how to locate, evaluate, and incorporate a variety of sources into their writing. They will use these to conduct independent research and integrate it into a written essay.

Credits: 3

**ENGL 103 - College Writing II**

In this course, students will learn to read academic and persuasive discourse in an active, critical manner; develop deliberated positions on selected issues and questions; compose strongly supported and reasoned arguments regarding those issues and questions; acquire information literacy skills, learning efficient and productive strategies for research from both print and online sources; and complete documented essays which effectively integrate source materials into a persuasive whole.

Prerequisite: ENGL 101<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

**ENGL 104 - Critical Reading**

Students will refine and extend understanding of the rhetorical principles introduced in Critical Writing, applying them through the critical reading and analysis of complex texts. The texts to be considered will be drawn from a variety of media, genres, historical periods and diverse cultures. Students will examine the methods authors use in developing and expressing ideas to meet the needs of particular audiences and historical moments. They will practice extracting implied meanings, analyzing purpose, tone and style, and assessing casual factors and rhetorical effects to critical reading. As a reading, intensive course, English 104 will reinforce and refine compositional skills introduced in Critical Writing.

Prerequisites: ENGL 102<sup>C</sup> or ENGL 103<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

**ENGL 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**ENGL 150 - Writing to Discover**

An intensive writers' workshop where participants and facilitators work individually and in small groups to fine-tune the craft of their writing.

Course may be repeated up to 4 credits.

Credits: 1

**ENGL 180 - Society on the Screen**

Society on the Screen asks students to examine the question that humanist approaches ask — what is the human experience? — and to explore what answers film might offer. Students will identify and practice historical, philosophical, cultural and literary methods of inquiry and research.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**ENGL 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

### ENGL 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

### ENGL 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

### ENGL 204 - Composition and Rhetoric

Students will study rhetorical theory and its application in expository and persuasive forms of writing.

Prerequisites: (ENGL 102<sup>C</sup> or ENGL 103<sup>C</sup>) and (ENGL 104<sup>C</sup> or ENGL 210<sup>C</sup> or ENGL 220<sup>C</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

### ENGL 205 - Introduction to Professional Writing

This course will introduce students to a variety of documents typically produced by writers in professional workplace. It will build essential skills for communicating with varied audiences with whom one interacts in a professional capacity. Students will develop collaborative skills, learn effective rhetorical strategies for document design, and refine writing for clarity, conciseness, and usage. The concept of organizational communities of practice will be introduced, as well as ethical considerations and responsibilities that accompany professional discourse.

Prerequisites: (ENGL 102<sup>C</sup> or ENGL 103<sup>C</sup>) and (ENGL 104<sup>C</sup> or ENGL 210<sup>D</sup> or ENGL 220<sup>D</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course

### ENGL 214 - Introduction to Film Analysis

This course surveys contemporary and classic films, and introduces the practices of film analysis.

Prerequisites: ENGL 102<sup>D</sup> and ENGL 104<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

### ENGL 220 - Introduction to Literary and Cultural Studies

Students will read and write critically about literary texts (written and visual), cultural theory, and avenues of inquiry that theoretical approaches open for interpretation. Students will also learn how to locate and evaluate the resources that literary, historical, philosophical, and cultural studies depend on, and how to use disciplinary-specific methods of presenting and documenting work.

Prerequisites: (ENGL 102<sup>C</sup> or ENGL 103<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

### ENGL 225 - Introduction to Creative Writing

Introduction to Creative Writing offers students the opportunity to develop their abilities to write poetry, fiction, and creative nonfiction. Original student work is read and discussed in class and in conferences with the instructor. Reading of classic and contemporary literature supplements the study of one's own writing.

Prerequisites: (ENGL 102<sup>C</sup> or ENGL 103<sup>C</sup>) and (ENGL 104<sup>C</sup> or ENGL 210<sup>D</sup> or ENGL 220<sup>D</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

### ENGL 230 - Introduction to Linguistics and Grammar

Students will study language structure, including grammar (consisting of phonology, morphology, syntax and semantics) within psycholinguistic and sociohistorical linguistic approaches.

Prerequisites: ENGL 102<sup>C</sup> and (ENGL 210<sup>D</sup> or ENGL 104<sup>D</sup> or ENGL 220<sup>D</sup> or minimum score of 1 in 'English Major')

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

### ENGL 235 - Writing for Non-Print Media

This course gives students the opportunity to explore how to write for non-print text like digital and social media, blogs, and film. Students will examine the use of audience, tone and purpose in these types of communication and its application in classrooms as well as in virtual communities.

Prerequisites: (ENGL 102<sup>C</sup> or ENGL 103<sup>C</sup>) and (ENGL 104<sup>C</sup> or ENGL 210<sup>D</sup> or ENGL 220<sup>D</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms



**ENGL 238 - Video Games as Literature**

Video games have become one of the most popular forms of storytelling. Video games offer players an interactive experience and complex, multi-directional narratives. Furthermore, millions of people play video games every day, experiencing those narratives. This course introduces literary theories for engaging and critiquing narratives. Students then use those theories to analyze and critique the video games they and others play.

Prerequisites: ENGL 102<sup>C</sup> and ENGL 104<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

**ENGL 242 - African-American Literature**

Students will be introduced to literature written by black Americans as it pertains to the American experience.

Prerequisites: (ENGL 103<sup>C</sup> or ENGL 102<sup>C</sup>) and (ENGL 210<sup>D</sup> or ENGL 104<sup>C</sup> or ENGL 220<sup>D</sup> or ENGL 025<sup>D</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course

**ENGL 243 - Literature of the Women's Movement**

Students will be introduced to literature written by women authors from various periods who offer multidimensional perspective on the world.

Prerequisite: ENGL 101 and 210 or English Major status.

Prerequisites: (ENGL 103<sup>C</sup> or ENGL 102<sup>C</sup>) and (ENGL 210<sup>D</sup> or ENGL 104<sup>C</sup> or ENGL 220<sup>D</sup> or ENGL 025<sup>D</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course

**ENGL 244 - Native American Literature**

Students will be introduced to literature written by Native Americans as it pertains to the American experience.

Prerequisites: (ENGL 103<sup>C</sup> or ENGL 102<sup>C</sup>) and (ENGL 210<sup>D</sup> or ENGL 104<sup>C</sup> or ENGL 220<sup>D</sup> or ENGL 025<sup>D</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course

**ENGL 246 - U.S. Latino/a Literatures**

Students will be introduced to literature written in English by Latino Americans as it pertains to the American experience.

Prerequisites: (ENGL 103<sup>C</sup> or ENGL 102<sup>C</sup>) and (ENGL 210<sup>D</sup> or ENGL 104<sup>C</sup> or ENGL 220<sup>D</sup> or ENGL 025<sup>D</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Thematic Thread(s): Cultural Literacy & Community Building, Transfer Thread Completion Course, United States in Global Context

**ENGL 248 - Asian Literature**

Students will study of such standard works as the Bhagavad-Gita, the writings of Confucius, and the Bible, in addition to contemporary works from India, China, Japan, and additional regions in Asia.

Prerequisites: (ENGL 103<sup>C</sup> or ENGL 102<sup>C</sup>) and (ENGL 210<sup>D</sup> or ENGL 104<sup>C</sup> or ENGL 220<sup>D</sup> or ENGL 025<sup>D</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Thematic Thread(s): Human Diversity & Well-Being, Transfer Thread Completion Course

**ENGL 249 - Life/Lit/Service**

Life/Lit/Service will explore selected literary and linguistic concerns- e.g. representations of place, class, ethnicity and/or dialectal variation- through a service learning experience, in this case, an intensive week-long trip/service project at an off-campus location (e.g. San Francisco). This course may be repeated for up to three credits.

Credits: 1

**ENGL 260 - Elementary College Latin I**

This course introduces students to the Latin language, concentrating on the study of basic forms, grammar, and introductory readings.

Credits: 3

**ENGL 261 - Elementary College Latin II**

This course provides students further study of the Latin language, concentrating on the study of advanced grammar and more complex readings.

Prerequisite: ENGL 260<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

**ENGL 288 - Classic Theatre Tour**

The study of classic drama, climaxed by a trip to the Stratford Shakespeare Festival in Ontario, Canada; the Shaw Festival Theater; or other appropriate theaters in Toronto. Offered in the summer. Travel fee required.

Prerequisites: (ENGL 103<sup>C</sup> or ENGL 102<sup>C</sup>) and (ENGL 210<sup>D</sup> or ENGL 104<sup>C</sup> or ENGL 220<sup>D</sup> or ENGL 025<sup>D</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

**ENGL 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ENGL 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**ENGL 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisites: (ENGL 102<sup>C</sup> or ENGL 103<sup>C</sup>) and (ENGL 210<sup>D</sup> or ENGL 104<sup>C</sup> or ENGL 220<sup>D</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 1-3

Term(s) Typically Offered: Offered Fall Terms

**ENGL 300 - Queer Literature and Film**

Queer Literature and Film is a survey of LGBT+ texts highlighting "queer" as both a term of identity and as a practice of analysis and critique. Students will read, watch, discuss, and analyze a variety of media produced by and about diverse queer writers, filmmakers, and activists from pre-Stonewall to current creators employing an intersectional understanding of how differences in race, class, and ability also impact experiences of gender and sexuality.

Prerequisites: ENGL 102<sup>D</sup> and ENGL 104<sup>D</sup> and ENGL 220<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1, Senior 2 or Sophomore 2.

**ENGL 305 - Practicum: Teaching Writing**

Students will learn to develop, respond to, evaluate, and grade student writing and related tasks. They will also be introduced to concepts important in the tutoring of student writers, as well as introductory theory used in the teaching of writing. Required for certification to teach English in the secondary schools.

Prerequisites: (ENGL 102<sup>C</sup> or ENGL 103<sup>C</sup>) and (ENGL 104<sup>C</sup> or ENGL 210<sup>D</sup> or ENGL 220<sup>D</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students in the BSED1224 program.

**ENGL 307 - Writing About Electronic Media and Film**

This course develops writing and theoretical skills in an examination of issues in electronic and digital media studies. Students analyze issues and individual examples relating to such topics as the Internet, texting, television, film, video games, print and visual journalism, media convergence, and mass media economics.

Prerequisites: (ENGL 102<sup>C</sup> or ENGL 103<sup>C</sup>) and (ENGL 104<sup>C</sup> or ENGL 210<sup>D</sup> or ENGL 220<sup>D</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 308 - Advertising Copywriting**

Work in the writing and production of advertising copy.

Prerequisites: (ENGL 102<sup>C</sup> or ENGL 103<sup>C</sup>) and (ENGL 104<sup>C</sup> or ENGL 210<sup>D</sup> or ENGL 220<sup>D</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 311 - Chaucer and Medieval Culture**

Students will study works by Chaucer and his contemporaries within the context of later medieval culture.

Prerequisites: (ENGL 103<sup>C</sup> or ENGL 102<sup>C</sup>) and (ENGL 025<sup>D</sup> or ENGL 104<sup>C</sup> or ENGL 210<sup>D</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 312 - Introduction to Shakespeare**

Students will study selected comedies, tragedies and histories within their literary and historical contexts.

Prerequisites: (ENGL 103<sup>C</sup> or ENGL 102<sup>C</sup>) and (ENGL 210<sup>D</sup> or ENGL 104<sup>C</sup> or ENGL 025<sup>D</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 314 - European Film**

Students will critically analyze films from countries in the European Union with particular emphasis on those with high annual film productivity such as France, United Kingdom, Italy, Spain, and Germany. The emphasis is on contemporary films, with optional contrast to historical trend-setting films.

Prerequisites: (ENGL 102<sup>C</sup> or ENGL 103<sup>C</sup>) and (ENGL 104<sup>C</sup> or ENGL 210<sup>C</sup> or ENGL 220<sup>C</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 315 - The Cinematic Review: Historical and Critical Writing**

This course surveys significant motion pictures with emphasis upon the techniques of film making and film reviewing.

Prerequisites: (ENGL 102<sup>C</sup> or ENGL 103<sup>C</sup>) and (ENGL 104<sup>C</sup> or ENGL 210<sup>D</sup> or ENGL 220<sup>D</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building,

Conservation, Technology & Imagination, Transfer Thread Completion

Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 316 - Asian Film**

Students will critically analyze films from India and East Asia, with emphasis is on contemporary films from China and Japan. Also meets requirements for the Asian Studies Minor.

Prerequisites: (ENGL 102<sup>C</sup> or ENGL 103<sup>C</sup>) and (ENGL 104<sup>C</sup> or ENGL 025<sup>D</sup> or ENGL 210<sup>D</sup> or ENGL 220<sup>D</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 317 - British Literature I**

This course provides a comprehensive study of authors and literary works from the Old English period through Milton.

Prerequisites: (ENGL 104<sup>C</sup> or ENGL 210<sup>D</sup> or ENGL 220<sup>D</sup> or minimum score of 1 in 'English Major')

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 318 - British Literature II**

This course provides a comprehensive survey of authors and literary works from the Civil War and Restoration through the early 20th century.

Prerequisites: (ENGL 102<sup>C</sup> or ENGL 103<sup>C</sup>) and (ENGL 104<sup>C</sup> or ENGL 210<sup>D</sup> or ENGL 220<sup>D</sup>)

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 319 - American Literature I**

This course provides a comprehensive survey of American literature from Puritan times through Melville.

Prerequisites: (ENGL 103<sup>C</sup> or ENGL 102<sup>C</sup>) and (ENGL 210<sup>D</sup> or ENGL 104<sup>C</sup> or ENGL 220<sup>D</sup> or ENGL 025<sup>D</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 320 - American Literature II**

This course provides a comprehensive survey of American literature from Whitman through modern times.

Prerequisites: (ENGL 103<sup>C</sup> or ENGL 102<sup>C</sup>) and (ENGL 210<sup>D</sup> or ENGL 104<sup>C</sup> or ENGL 220<sup>D</sup> or ENGL 025<sup>D</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 327 - Healthcare Writing**

Students will develop the advanced literacy and research skills needed for writing successfully in the healthcare field. Working individually and in teams typical of medical practice, students will explore strategies for effective written and spoken interaction with both patients and colleagues. Coursework relies heavily on learning to use medical databases and provide students with the theories and additional tools necessary to translate medical information into presentations for both medical professionals and the general public.

Prerequisite: ENGL 102<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 328 - Young Adult Literature**

This course surveys literature for adolescents and young adults and is intended to cultivate book appreciation, improve book knowledge, and provide curriculum enrichment in intermediate, junior and senior high school libraries.

Prerequisites: (ENGL 102<sup>C</sup> or ENGL 103<sup>C</sup>) and (ENGL 104<sup>C</sup> or ENGL 210<sup>D</sup> or ENGL 220<sup>D</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 330 - Literary Publications & Design**

This course offers students a deeper understanding of print and production practices for students with critical and creative writing backgrounds. Students will study theories and models - both historical and contemporary - for print design, layout, typography and production environment, while applying such theory to the practice of publishing literary artifacts.

Prerequisites: (ENGL 102<sup>C</sup> or ENGL 103<sup>C</sup>) and (ENGL 210<sup>D</sup> or ENGL 104<sup>C</sup> or ENGL 220<sup>D</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in English, English Literature, Engl Lit-Language & Literature, Engl Lit-Literary&Cult Studies, English Writing, English Writing-Professional or English Writing-Creative.

**ENGL 331 - Historical Development of the English Language**

Students will examine each historical period to discover the structure of the language, its spelling, vocabulary, syntax, and the influences of social conditions upon it.

Prerequisites: (ENGL 102<sup>C</sup> or ENGL 103<sup>C</sup>) and (ENGL 104<sup>C</sup> or ENGL 210<sup>D</sup> or ENGL 220<sup>D</sup>) or minimum score of 1 in 'English Major')

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 332 - Modern English Grammar and Syntax**

This course provides a brief history of the English language and thorough study of traditional and transformational grammar with emphasis on syntax. Differences between prescriptive and descriptive grammar and problems of current usage are also considered.

Prerequisites: (ENGL 102<sup>C</sup> or ENGL 103<sup>C</sup>) and (ENGL 104<sup>C</sup> or ENGL 210<sup>D</sup> or ENGL 220<sup>D</sup>) or minimum score of 1 in 'English Major')

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 334 - Writing Community Stories**

The course will prepare students to research and engage local communities as well as write a range of professional writing genres to engage those communities, particularly professional writing narratives. Students will learn research methods for studying their local communities. They will learn to study the community's discourse, collective issues, social norms, and larger narratives. Students will then learn to research, draft, and revise a range of writing genres and narratives that enable the students to engage and/or support their local communities.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

**ENGL 335 - Writing for Video Games**

In this course, students will learn to create the two types of writing essential to contemporary video games: storytelling and technical writing. Students will learn the essential skills of plot, character, and dialogue writing, enabling them to create the stories that players experience in video games. Students will also learn the skills of usability, plain language, and explanation writing, which they will use to create instructions and documentation for video games. By the end of the course, students will have produced a video-game narrative, an introductory setup for a video game, and instructions on how to modify the video game using the platform used to create the game.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

**ENGL 336 - Second Language Acquisition**

This course acquaints the prospective teacher with theories of second language acquisition (SLA). SLA surveys the processes of acquiring/learning language including the following issues: sound system-phonemic inventory; words-lexicon; semantics; syntax; critical period for second language learning; linguistic creativity, competence and performance.

Prerequisites: (ENGL 102<sup>C</sup> or ENGL 103<sup>C</sup>) and (ENGL 104<sup>C</sup> or ENGL 210<sup>D</sup> or ENGL 220<sup>D</sup>) or minimum score of 1 in 'English Major')

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 338 - Creative Writing: Creative Nonfiction**

This writing workshop provides the opportunity for students to develop their abilities in writing creative nonfiction. Original student work is read and discussed in class and in conferences with the instructor. Students will also read and analyze classic and contemporary creative nonfiction. This course may be repeated for up to six credits.

Prerequisites: (ENGL 102<sup>C</sup> or ENGL 103<sup>C</sup>) and (ENGL 104<sup>C</sup> or ENGL 210<sup>D</sup> or ENGL 220<sup>D</sup>) or minimum score of 1 in 'English Major')

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 339 - Creative Writing: Fiction**

This writing workshop provides the opportunity for students to develop their abilities in writing fiction. Original student work is read and discussed in class and in conferences with the instructor. Students will also read and analyze classic and contemporary fiction. This course may be repeated for up to six credits.

Prerequisites: (ENGL 102<sup>C</sup> or ENGL 103<sup>C</sup>) and (ENGL 104<sup>C</sup> or ENGL 210<sup>D</sup> or ENGL 220<sup>D</sup> or minimum score of 1 in 'English Major') and ENGL 225<sup>D</sup>

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 340 - Creative Writing: Poetry**

This writing workshop provides the opportunity for students to develop their abilities in writing poetry. Original student work is read and discussed in class and in conferences with the instructor. Students will also read and classic and contemporary poetry is assigned. This course may be repeated for up to six credits.

Prerequisites: (ENGL 102<sup>C</sup> or ENGL 103<sup>C</sup>) and (ENGL 104<sup>C</sup> or ENGL 210<sup>D</sup> or ENGL 220<sup>D</sup> or minimum score of 1 in 'English Major') and ENGL 225<sup>D</sup>

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 346 - Writing the Graphic Novel**

This creative writing workshop provides an opportunity for students to develop their abilities in creating graphic novels. Original student work is read and discussed in class as well as critiqued in conference with the instructor. Students will also read and analyze historic and contemporary graphic novels. This course may be repeated for up to six (6) credits.

Prerequisites: ENGL 102<sup>D</sup> and (ENGL 104<sup>D</sup> or ENGL 220<sup>D</sup>) and ENGL 225<sup>D</sup> and (ART 105<sup>D</sup> or ART 205<sup>D</sup> or ART 305<sup>D</sup> or ART 106<sup>D</sup> or ART 206<sup>D</sup> or ART 306<sup>D</sup> or ART 107<sup>D</sup> or ART 207<sup>D</sup> or ART 307<sup>D</sup> or ART 108<sup>D</sup> or ART 208<sup>D</sup> or ART 308<sup>D</sup> or ART 114<sup>D</sup> or ART 214<sup>D</sup> or ART 314<sup>D</sup> or ART 213<sup>D</sup> or ART 313<sup>D</sup> or ART 413<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 349 - Creative Writing: Screenplay**

Students enrolled in Creative Writing: Screenplay will learn how to write the Hollywood narrative screenplay. Students will develop a workable story and characters that show growth. They will then write a screenplay and develop a marketing plan to sell it.

Prerequisites: (ENGL 102<sup>C</sup> or ENGL 103<sup>C</sup>) and (ENGL 104<sup>C</sup> or ENGL 210<sup>D</sup> or ENGL 220<sup>D</sup> or minimum score of 1 in 'English Major') and ENGL 225<sup>D</sup>

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

**ENGL 360 - Latin Language and Literature**

This course focuses on classical and medieval Latin verse and prose, with a continuing review of grammar as necessary.

Prerequisites: (ENGL 102<sup>C</sup> or ENGL 103<sup>C</sup>) and (ENGL 104<sup>C</sup> or ENGL 210<sup>D</sup> or ENGL 220<sup>D</sup> or minimum score of 1 in 'English Major') and ENGL 260<sup>D</sup> and ENGL 261<sup>D</sup>

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 365 - Writing for the World Wide Web**

This course examines the structure, form and rhetoric or writing for web environments.

Prerequisites: (ENGL 102<sup>C</sup> or ENGL 103<sup>C</sup>) and (ENGL 104<sup>C</sup> or ENGL 210<sup>D</sup> or ENGL 220<sup>D</sup> or minimum score of 1 in 'English Major')

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 389 - Stratford Shakespeare Tour**

Students will study of the works and time of Shakespeare in cultural context. The trip concludes with travel to the Stratford Shakespeare Festival in Stratford, Ontario, Canada. Offered in the summer only. Travel fee required.

Prerequisites: (ENGL 103<sup>C</sup> or ENGL 102<sup>C</sup>) and (ENGL 210<sup>D</sup> or ENGL 104<sup>D</sup> or ENGL 220<sup>D</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**ENGL 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 402 - World Literature**

Students will critically read and analyze selected works by global writers beyond the U.S. and Britain.

Prerequisites: (ENGL 103<sup>C</sup> or ENGL 102<sup>C</sup>) and (ENGL 210<sup>D</sup> or ENGL 104<sup>D</sup> or ENGL 220<sup>D</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 403 - Literary and Cultural Theory**

Students will study select literary and cultural theory from Plato to the present day, with application to critical analysis of the literary arts.

Prerequisites: (ENGL 103<sup>C</sup> or ENGL 102<sup>C</sup>) and (ENGL 210<sup>D</sup> or ENGL 104<sup>D</sup> or ENGL 220<sup>D</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 409 - Professional English**

ENGL 409 instructs upper-level English majors in the goals, audiences, sources, and methods for professionalization. In this course, students reflect on and define their individual undergraduate experiences and create a personal narrative from their experiences. Students will then identify and define a career field. By the end of the course, students will develop strategies for connecting their individual narrative to their specific desires for possible career fields.

Prerequisites: (ENGL 102<sup>C</sup> or ENGL 103<sup>C</sup>) and (ENGL 104<sup>C</sup> or ENGL 210<sup>D</sup> or ENGL 220<sup>D</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 410 - Literature of the Environment**

This course encourages those interested in the rhetoric of science, nature writing, and environmentalism to pose informed questions regarding the language, rhetoric, images, and ideas found in significant poetry and prose, fiction and nonfiction, that concern the environment.

Prerequisites: (ENGL 103<sup>C</sup> or ENGL 102<sup>C</sup>) and (ENGL 210<sup>D</sup> or ENGL 104<sup>C</sup> or ENGL 220<sup>D</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 411 - Science Fiction**

Science Fiction situates the genre as a form of critique of the concept of the future. The course provides a literary and historical path for comprehending the genre's evolution. It engages students in cross-disciplinary conversations about scientific and technological advancements that inform narratives as well as establishes how metaphors of the alien drive science fiction's forecasts. The course highlights how science fiction shapes particular ways of seeing and enacts such modes through the study of diverse texts and application of concepts in projects about our future lives.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course  
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

**ENGL 429 - Grant and Proposal Writing**

Students will review the research and rhetoric associated with writing successful grants and proposals.

Prerequisites: (ENGL 102<sup>C</sup> or ENGL 103<sup>C</sup>) and (ENGL 104<sup>C</sup> or ENGL 210<sup>D</sup> or ENGL 220<sup>D</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 450 - Internship**

Students will gain applied writing experience at a venue outside of the classroom.

Prerequisites: (ENGL 102<sup>C</sup> or ENGL 103<sup>C</sup>) and (ENGL 104<sup>C</sup> or ENGL 210<sup>D</sup> or ENGL 220<sup>D</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 480 - Literature Seminar**

The seminar focuses on a major author or pair of authors, a single literary genre, or a specific literary period.

Prerequisites: (ENGL 103<sup>C</sup> or ENGL 102<sup>C</sup>) and (ENGL 210<sup>D</sup> or ENGL 104<sup>C</sup> or ENGL 220<sup>D</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 490 - Independent Study**

A program of supervised independent study. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Prerequisites: (ENGL 102<sup>C</sup> or ENGL 103<sup>C</sup>) and (ENGL 104<sup>C</sup> or ENGL 210<sup>D</sup> or ENGL 220<sup>D</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 491 - Senior Writing Project**

Creative or expository writing projects.

Prerequisites: (ENGL 102<sup>C</sup> or ENGL 103<sup>C</sup>) and (ENGL 104<sup>C</sup> or ENGL 210<sup>D</sup> or ENGL 220<sup>D</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENGL 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisites: (ENGL 102<sup>C</sup> or ENGL 103<sup>C</sup>) and (ENGL 104<sup>C</sup> or ENGL 210<sup>D</sup> or ENGL 220<sup>D</sup>) or minimum score of 1 in 'English Major'

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## English as a Second Language (ESL)

**ESL 001 - Start ESL Reading**

This course is not for native speakers of English. This is a beginning ESL reading course in which students focus on understanding the meaning of written English by reading a variety of texts. Students develop skills to read and understand English to make a transition from word-by-word translation to reading comprehension.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 002 - Basic ESL Reading**

This course is not for native speakers of English. This is a basic ESL reading course in which students read various types of written texts in order to improve reading skills. Topics relate to academic and everyday life. Emphasis is placed on building vocabulary, developing reading strategies and critical thinking skills.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 003 - Intermediate ESL Reading**

This course is not for native speakers of English. Students learn to read English as a second language fluently by reading interesting stories with a variety of topics, controlled for proficiency with appropriate difficulty. The course focuses on developing reading skills including pre-reading, skimming and scanning as well as building and developing a working English vocabulary. Students also write responses to the stories they read and share their reflections with their classmates.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 004 - High Intermediate ESL Reading**

This course is not for native speakers of English. This course uses a variety of authentic, meaningful and stimulating ESL readings. The course focuses on developing critical reading strategies, skimming and scanning abilities, increasing reading speed, building academic vocabulary power, drawing inferences, previewing, predicting and finding the main idea. Students will build successful reading strategies to comprehend language and concepts presented in college textbooks.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 005 - Advanced ESL Reading**

This course is not for native speakers of English. In this course, students read a variety of authentic, meaningful and stimulating texts in order to help students develop critical reading strategies, increase reading speed and build academic vocabulary. The goal of this class is to prepare students with successful ESL reading strategies to comprehend language and concepts that students will encounter in university level textbooks through a variety of disciplines as is required by a liberal studies curriculum.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 011 - Start ESL Listening**

This course is not for native speakers of English. This course helps students with basic ESL listening needs in daily life situations. Students develop their listening and speaking skills in order to interact with others. Emphasis is also placed on recognizing different sounds in American English.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 012 - Basic ESL Listening**

This course is not for native speakers of English. This course helps students with basic ESL listening needs in daily life and basic academic situations. Focus is on listening comprehension, with students developing their listening and speaking skills in order to interact with others.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 013 - Intermediate ESL Listening I**

This course is not for native speakers of English. This course helps students with basic ESL listening needs in daily life and basic academic situations. Focus is on interpersonal communication skills in spoken American English. The course focuses on a variety of listening comprehension skills and strategies in order for students to become more effective listeners in a variety of settings.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 014 - High Intermediate ESL Listening**

This course is not for native speakers of English. This course prepares students for the demands of college-level academic listening tasks. The course aims to enhance students' ESL listening skills and to provide strategies and practice for listening to instructors and classmates who use a variety of speech patterns and vocabulary in class lectures and discussion.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 015 - Advanced ESL Listening**

This course is not for native speakers of English. This course prepares students for the demands of college-level academic listening tasks. The course aims to enhance students' ESL listening skills and to provide strategies and practice for listening to instructors and classmates who use a variety of speech patterns and vocabulary in class lectures and discussion. Students will practice listening to lectures from a variety of academic disciplines and will analyze the material that they hear. Students will also practice strategies for active participation in lectures and class discussion.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 021 - Start ESL Writing**

This course is not for native speakers of English. This course provides basic ESL writing instruction for beginning level English language learners. Students will work on sentence and short-paragraph length writing to express their ideas in English.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 022 - Basic ESL Writing**

This course is not for native speakers of English. This course helps ESL students learn how to generate topics and write paragraph length discourse. There is also an emphasis on reading to understand writing styles and organization strategies. Students develop writing fluency by keeping a journal of American English essays throughout the semester.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 023 - Intermediate ESL Writing**

This course is not for native speakers of English. This course helps students learn to generate topics and write paragraph length ESL discourse. Sentence structure and writing conventions of academic American English are also explored. Students will study application of vocabulary and grammar skills for writing and practice reading to understand writing better.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 024 - High Intermediate ESL Writing**

This course is not for native speakers of English. This course prepares students to write academic papers by exploring elements of academic writing and its process. Students generate topics, write cohesive paragraphs, use organizational strategies and learn to consider audience. Students also explore self-expression and writing identity through ESL journal writing.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 025 - Advanced ESL Writing**

This course is not for native speakers of English. In this course, students learn to write for a variety of purposes considering their audience. Lessons include developing appropriate writing styles and applying organizational strategies for different styles of texts. Students practice the writing process and practice prewriting, revision and editing. Students also learn about the U.S. academic expectations of writers, including appropriate citation practices and the importance of avoiding plagiarism. Students also learn strategies to improve their writing through self and peer review.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 031 - Start ESL Speaking**

This course is not for native speakers of English. This course emphasizes interpersonal ESL communication at a beginning level. Class meetings center around speaking activities that encourage fluency. Some attention will also be given to cultural considerations, pronunciation and conversation strategies.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 032 - Basic ESL Speaking**

This course is not for native speakers of English. This course emphasizes interpersonal ESL communication with some focus on academic speech. Class meetings center around speaking activities that encourage fluency and comprehensibility. The class will help students set realistic goals for their pronunciation practices and learning strategies to improve their comprehensibility and confidence in speaking English.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 033 - Intermediate ESL Speaking**

This course is not for native speakers of English. This course is designed to help students develop their own identity as an ESL speaker and user. In this course, students draw on their background knowledge of conversation skills from their primary language while they explore standard conventions in American English. The class will help students set realistic goals for their pronunciation studies and learn strategies to improve their comprehensibility and confidence in speaking English.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 034 - High Intermediate ESL Speaking**

This course is not for native speakers of English. This course helps students explore the dynamic of ESL communication between different cultures. It provides students with strategies to communicate with people from different cultures and provides opportunities for students to interact with speakers from different cultural backgrounds. The emphasis of the class is oral communication, but students also learn about nonverbal communication and develop reading and writing skills.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 035 - Advanced ESL Speaking**

This course is not for native speakers of English. This course is designed to enhance students' academic language skills to help them be successful in U.S. college courses. Students will learn to participate effectively in a variety of academic situations, such as discussions, lectures, study groups, team-projects and debates. The students will acquire a number of study skills including note-taking, brainstorming, problem-solving and pragmatic strategies for participating in class discussions.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 041 - Introduction to American English Grammar**

This course is not for native speakers of English. This course presents the basics of American English grammar with an emphasis on conversational strategies.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 042 - Basic American Grammar**

This course is not for native speakers of English. This course presents the basics of American English grammar with an emphasis on the sources from authentic written texts.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 043 - Intermediate American English Grammar**

This course is not for native speakers of English. This course is designed to reinforce and refine knowledge of common grammatical structures. Students will increase their familiarity with and use of standard grammatical structures. Emphasis will be placed on grammatical structures common to academic speech and writing.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 044 - High Intermediate American English Grammar**

This course is not for native speakers of English. This course is designed to reinforce and refine knowledge of common grammatical structures. Students will increase their familiarity with and use of standard grammatical structures. Emphasis will be placed on grammatical structures common to academic speech and writing.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 045 - Advanced American English Grammar**

This course is not for native speakers of English. This course is designed to develop the abilities needed to use a variety of grammatical structures effectively and efficiently. The emphasis is on academic English in oral and written communication.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 051 - Introduction to American Culture**

This course is not for native speakers of English. In this course, students learn about U.S. culture and explore resources available in the community of Slippery Rock, PA. students study pragmatic strategies to help them have successful interactions with others in the Slippery Rock community.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 052 - Exploring American Culture I**

This course is not for native speakers of English. In this course, students learn about American life on campus and in the town and region. Students will learn to use the resources available at SRU and in Slippery Rock and Pittsburgh area. The aim of the course is to help students adjust more quickly and completely to living and studying in America and at SRU.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 053 - Exploring American Culture II**

This course is not for native speakers of English. In this course, students learn about American life on campus and in the town of Slippery Rock and the Pittsburgh region. Students will compare cultural perspectives from around the world. In addition, students will explore academic culture at SRU and learn to use the resources available at SRU.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 054 - Understanding American Culture**

This course is not for native speakers of English. In this course, students learn about American life on campus and in the town and region. Students will compare cultural perspectives from around the world. In addition, students will explore academic culture at SRU and learn to use the resources available at SRU. By exploring culture through a variety of activities, both in and outside of the classroom, students develop a repertoire of listening, speaking, reading and writing strategies for effective interactions in the U.S.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 055 - Living in America**

This course is not for native speakers of English. This course exposes students to a combination of American history and culture. Students will explore a variety of cultural topics and historical events. A multimedia approach will be used to develop cultural awareness. The class will encourage students to engage in open communication concerning their understandings and assumptions about life in the U.S. Students will participate in group projects in which they present cultural and historical backgrounds about important U.S. events or practices. Students will also explore the implication of U.S. history and culture for university life.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 061 - ESL Tutorial I**

This course is not for native speakers of English. This course is a required tutorial. ESL tutoring provides individualized attention for students' language learning needs by pairing them with SRU students for small group instruction and interactions.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 062 - ESL Tutorial II**

This course is not for native speakers of English. This course is a required tutorial. ESL tutoring provides individualized attention for students' language learning needs by pairing them with SRU students for small group instruction.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 063 - ESL Tutorial III**

This course is not for native speakers of English. This course is a required tutorial. ESL tutoring provides individualized attention for students' language learning needs by pairing them with SRU students for small group instruction.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 064 - ESL Tutorial IV**

This course is not for native speakers of English. This course is a required tutorial. ESL tutoring provides individualized attention for students' language learning needs by pairing them with SRU students for small group instruction.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 065 - Independent Seminar**

This course is not for native speakers of English. This course is a self-driven, student-oriented academic ESL practice session. In the beginning of a semester, each student meets with the director about their study plan in an American university and the director assigns a semester-long task. In the middle and at the end of a semester, the student must report the progress and the outcome of the study to the director.

Credits: 0

Term(s) Typically Offered: Offered as Needed

# Environmental Geoscience (EGEO)

**EGEO 100 - Environmental Geology**

The course examines problems of mineral, energy and water resources, waste disposal, soils and health, geologic hazards, and land use.

Resources are the common property of all people. Sustainable use of resources is poised by equitable distribution of cost and benefits among diverse peoples.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

**EGEO 101 - Physical Geology**

Emphasis is placed upon those processes acting to create earth materials, landforms, and structures in and on the earth.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**EGEO 110 - Environmental Geology Lab**

Complement to EGEO 100; laboratory study of geologic hazards and geologic resources with a focus on local environmental issues. Course may require a weekend field trip.

Prerequisite: EGEO 100 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

**EGEO 111 - Physical Geology Lab**

Complement to EGEO 101; laboratory studies of minerals and rocks illustrate the concepts of EGEO 101.

Prerequisite: EGEO 101 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered as Needed

**EGEO 121 - Meteorology/Lab**

Introduction to principles controlling weather and their effect on people and the environment. Includes lab.

Credits: 4

Term(s) Typically Offered: Offered Fall & Spring Terms

**EGEO 131 - Oceanography**

Introduction to the physical, chemical and biological aspects of the marine environment.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context



**EGEO 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**EGEO 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**EGEO 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**EGEO 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**EGEO 201 - Earth Materials and Processes/Lab**

Overview of the composition and structure of Earth. Introduction to fundamental physical and chemical Earth processes. Identification of rocks and minerals based on observation and study of physical properties. Includes lab.

Credits: 4

Term(s) Typically Offered: Offered Fall Terms

**EGEO 202 - Earth History/Lab**

The evolutionary history of the earth and its life. Two Saturday field trips required.

Prerequisite: EGEO 201<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Spring Terms

**EGEO 203 - Quantitative Methods**

Review of mathematical techniques and principles. Training in the application of quantitative methods to the understanding and analysis of geological and environmental problems. Students will apply a variety of mathematical techniques to a range of geological and environmental problems. Emphasis will be placed on practical applications of quantitative methodology and the development and use of spreadsheets to manage, analyze, and present data sets.

Prerequisites: EGEO 202<sup>D</sup> and (MATH 125<sup>D</sup> or MATH 225<sup>D</sup> or MATH 230<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**EGEO 221 - Weather and Climate Forecasting**

An analysis and use of local and regional computer-collected surface and upper air weather data to forecast weather. A study of past records of climate as clues to future changes. Includes lab.

Prerequisite: EGEO 121<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

**EGEO 231 - Aerial Photography Interpretation**

Introduction to photogrammetry, remote sensing, and interpretation of geologic and cultural imagery.

Prerequisites: EGEO 101<sup>D</sup> or EGEO 201<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

**EGEO 251 - Aviation Meteorology**

This course is a study of weather conditions commonly encountered in aviation. The subject is treated from the viewpoint of the forecaster and the pilot. Includes lab.

Prerequisite: EGEO 121<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

**EGEO 271 - Geotechniques: Lab**

Training in laboratory techniques and instruments for geological, geophysical and environmental surveys.

Credits: 2

**EGEO 272 - Introduction to Georeports/Lab**

Training in the grammatical and stylistic conventions of technical writing in environmental, geoscientific and geographical disciplines.

Prerequisite: ENGL 102<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

**EGEO 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**EGEO 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**EGEO 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**EGEO 303 - Paleontology/Lab**

An introduction to the fossil record and evolution of life through earth history, including the nature of science, marine and land dwelling organisms and basic theories of evolution and extinction of organisms.

Prerequisites: EGEO 201<sup>D</sup> and EGEO 202<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 323 - Planetary Geology**

Systematic study of geological processes that have operated on the planets, natural satellites, and minor bodies in the Solar System. Course will cover solar system formation and evolution, planetary interiors, surficial processes, the structure and history of individual planetary bodies. Quantitative techniques will be used to examine data from current and historic exploration missions.

Prerequisites: EGEO 202<sup>D</sup> and EGEO 203<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 327 - Structural Geology**

Origin and description of primary and secondary structures of sedimentary, igneous, and metamorphic rocks.

Prerequisites: EGEO 201<sup>D</sup> and (EGEO 202<sup>D</sup> or PNGE 201<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 328 - Plate Tectonics**

Plate tectonics is the study of the motion of the lithosphere and deformation of the earth's crust on a regional scale. The course will evaluate the plate tectonic paradigm in terms of its historical evolution and modern application to understanding earth processes. The course examines a broad range of tectonic phenomena and considers the specific geological and geophysical processes involved. Topics covered include the uplift, deformation and metamorphism of mountain belts, the formation of ocean basins, the subsidence of sedimentary basins, the collision of continents and volcanic arcs, earthquake seismology of plate boundaries, magmatism related to plate processes, and tectonics and landscapes.

Prerequisite: EGEO 202<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 340 - Air Pollution Meteorology**

A study of meteorological parameters of air pollution concentration, dispersion, and removal. Includes air pollution forecasting and modeling.

Prerequisite: EGEO 121<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 341 - Geomorphology/Lab**

A study of landforms, their origin and relation to geologic processes, structure and climate.

Prerequisites: EGEO 201<sup>D</sup> or GES 150<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 342 - Glacial Geology/Lab**

A study of erosional and depositional landforms left by glaciers and their meltwaters. Glacial landforms and soils are examined on maps, air photos and in the field.

Prerequisites: GES 150<sup>D</sup> or EGEO 202<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 351 - Mineralogy/Lab**

Systematic crystallography, crystal chemistry, physics, genesis, occurrence, and identification of minerals.

Prerequisites: EGEO 201<sup>D</sup> and CHEM 108<sup>D</sup> and CHEM 112<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Fall Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 352 - Petrology/Lab**

Classification, occurrence, and genesis of igneous, sedimentary and metamorphic rocks. Identification using hand specimens and polarizing microscope (thin sections).

Prerequisite: EGEO 351<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 358 - Introduction to Geophysics/Lab**

An introduction to geophysics and geophysical methods and their use in the study of Earth's interior. Emphasis will be placed on illuminating subsurface geological features and applications in fields such as groundwater studies, development of energy resources and environmental studies.

Prerequisites: PHYS 211<sup>C</sup> and MATH 225<sup>C</sup> and EGEO 201<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 360 - Introduction to Hydrology/Lab**

A study of the occurrence and movement of water and human's effect on this basic resource.

Prerequisite: EGEO 201<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 362 - Stratigraphy/Lab**

Principles of stratigraphy, stratigraphic mapping, and graphic techniques used in stratigraphic interpretation. Two Saturday field trips may be required.

Prerequisites: EGEO 201<sup>D</sup> and EGEO 202<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Fall Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 368 - Women in Science**

This course will explore the issues of women in science. Specifically it will address the issues of gender in relation to the theory and practice of science and technology. The course content will use case studies to explore women that have made significant contributions to science despite barriers limiting their access to education and professional organizations. The content will cover topics including how the development of educational systems and professions affected women over the centuries, how scientific approaches have evolved, and how women meet challenges in today's scientific community. The case studies will provide students with the opportunity to analyze and synthesize the information presented into an understanding on the evolution of scientific thought and women's roles in science.

Credits: 3

Term(s) Typically Offered: Offered Winter Terms

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 399 - Field Camp**

Field Camp is a final requirement and is usually conducted at a field study location.

Credits: 1-9

Term(s) Typically Offered: Offered as Needed

**EGEO 448 - X-ray Spectrometry**

Concepts of x-ray production and interaction with crystalline materials. Application of x-ray diffraction methods for identification of minerals, and x-ray fluorescence techniques for chemical analysis. One lecture and one two-hour laboratory per week.

Prerequisites: EGEO 201<sup>D</sup> and CHEM 107<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 450 - Internship**

Supervised placement and research in selected public and private agencies. Permission of chairperson.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 451 - Geochemistry/Lab**

Basic thermodynamics applied to the geochemistry of natural systems. The course will focus on low temperature inorganic reactions that are important for the environmental fate and transport of contaminants in the environment. The course will require the use of computer spreadsheets and models to solve geochemical problems covered in lecture. Three hours of lecture and one hour of computer lab.

Prerequisites: EGEO 201<sup>D</sup> and CHEM 108<sup>D</sup> and CHEM 112<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Fall Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 453 - Geotechniques: Geochemistry**

Laboratory and field experiments to study the geochemistry of local environmental systems. Field sampling, in-field and laboratory analysis, and construction of experimental systems will be conducted. Field trips for sample collection will occur weekly.

Prerequisite: EGEO 451<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 458 - Geophysical Field Methods/Lab**

An introduction to seismic field methods and their use in the study of Earth's interior. Emphasis will be placed on the use of seismic methods to characterize subsurface geological features and applications in fields such as groundwater studies, development of energy resources and environmental studies.

Prerequisite: EGEO 358<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 460 - Hydrogeology**

A study of the quantitative and qualitative interrelationships of geologic materials and processes with ground water.

Prerequisite: EGEO 360<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 469 - Field Investigations in the Geosciences**

This course will provide students with the opportunity to practice the nature of fieldwork by observing, interpreting, collecting data and analyzing physical and human landscapes, and the natural, cultural and economic forces that are shaping them.

Credits: 1-3

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 476 - Geotechniques: Geophysics**

Lab and field techniques.

Prerequisite: EGEO 460 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): EGEO 327

Credits: 1

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

**EGEO 481 - Geologic Map Interpretation**

A seminar for advanced undergraduates in whom students and staff participate in map interpretation. One two-hour lab per week. Senior standing or permission of the instructor.

Corequisite(s): EGEO 362

Credits: 1

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

**EGEO 482 - Senior Seminar**

A seminar for advanced undergraduates in which students and staff participate in discussions concerning classical and current geological problems. Senior standing or permission of the instructor.

Credits: 1

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 490 - Independent Study**

Independent work on a topic in the earth sciences selected by the student with permission and advice of the instructor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EGEO 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Environmental Science (ENVS)

**ENVS 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**ENVS 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ENVS 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**ENVS 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ENVS 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ENVS 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**ENVS 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ENVS 311 - Environmental Monitoring and Sampling**

The course will focus on the development and implementation of successful sampling plans for water, soil and sediment. Basic sampling and analysis methods will be presented followed by hands-on field exercises employing these techniques. Field notebook documentation and report preparation will be emphasized. At least one field trip will be scheduled for a Saturday during the semester to give students hands-on experience with collection of environmental sample

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with department of Chemistry, Geography, Geology & Environm or Biology.

**ENVS 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENVS 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENVS 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**ENVS 440 - Science, Technology and the Environment**

A scientific study of interactions of global systems in the geosphere and biosphere. Selected global problems, such as waste production and disposal, energy use, atmospheric warming, ozone depletion, and acid deposition are analyzed along with possible alternatives. Four courses completed in the natural sciences and mathematics area of the liberal studies program.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENVS 450 - Environmental Science Internship**

Academic credit may be earned through a practicum experience, working for an agency or business. A minimum of 16 credits completed in the major and approval of the agency or business, the program director and the advisor.

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENVS 480 - Environmental Systems Analysis**

The student will investigate an environmental problem in conjunction with an appropriate faculty member as a research project. A minimum of 16 credits completed in the major and the approval of the program director and the advisor.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENVS 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENVS 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ENVS 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Exercise Science (EXSC)

**EXSC 100 - Introduction to Exercise Science: Careers and Content**

This course introduces students to the exercise science discipline and the numerous sub-disciplines of exercise science. Opportunities are provided to identify the various content areas of exercise science, characteristics of exercise science professionals and current trends in the field. Emphasis is placed on career planning and employment opportunities.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment is limited to students with a program in Exercise Science.

**EXSC 101 - Applied Anatomy/Lab**

This course focuses on the structure of the human body with emphasis on the musculoskeletal, cardiorespiratory, and nervous systems. The role of the musculoskeletal system in human movement is explored. Laboratory included.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment is limited to students with a program in Exercise Science.

**EXSC 107 - Introduction to Athletic Training**

Introduction to Athletic Training addresses the historical development of athletic training and the scope of present programs, including personnel, space and equipment, necessary supplies, conditioning, pharmacology, classification of sports injuries and tissue response to injuries.

Credits: 3

**EXSC 117 - Prevention and Emergency Care in Athletic Training**

This course is designed to facilitate learning of the cognitive and psychomotor knowledge, skills and abilities utilized in prevention and emergency care in Athletic Training. This course integrates cognitive concepts into progressively higher functional and practical application.

Prerequisites: (ERS 101<sup>B</sup> or EXSC 101<sup>B</sup>) and (ERS 107<sup>B</sup> or EXSC 107<sup>B</sup>)  
<sup>B</sup> Requires minimum grade of B.

Credits: 3

Enrollment is limited to students with a program in Athletic Training.

Enrollment limited to students with department of Exercise Sci & Athletic Train.

**EXSC 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**EXSC 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**EXSC 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**EXSC 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**EXSC 201 - Exercise Physiology with Lab**

This course focuses on the physiological bases of exercise with emphasis on the responses and adaptations of the human body to a variety of exercise stimuli. Laboratory included. Grade of C or better is required in this course.

Prerequisites: (ERS 101<sup>C</sup> or EXSC 101<sup>C</sup>) and (ERS 100 (may be taken concurrently)<sup>C</sup> or ERS 100<sup>\*C</sup>) (may be taken concurrently).

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment is limited to students with a program in Exercise Science.

**EXSC 202 - Biomechanics with Lab**

This course examines human movement using mechanical principles. Human anatomy and basic physics are combined to understand and analyze human movement with specific emphasis on physical activity and exercise. Laboratory included.

Prerequisites: (ERS 101<sup>C</sup> or EXSC 101<sup>C</sup>) and (ERS 100 (may be taken concurrently)<sup>C</sup> or EXSC 100 (may be taken concurrently)<sup>C</sup>) and PHYS 201<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment is limited to students with a program in Exercise Science.

**EXSC 204 - Introduction to Esports**

Do you like video games? This course will introduce students to the exciting world of competitive video gaming, known as "esports." Topics covered may include history, terminology, games, genres, developers, events, leagues, and venues, with a focus on health and performance implications of esports and esports-related career possibilities.

Credits: 3

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

**EXSC 220 - Clinical Experiences in Athletic Training - I**

This course is designed to provide opportunities for students to apply previously acquired athletic training knowledge, skills and abilities in the clinical setting under the direct supervision of a program approved preceptor. Emphasis is placed on practicing and implementing the current NATA Education Competencies designated at Level I in the learning over time model.

Prerequisites: ERS 117<sup>C</sup> or EXSC 117<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Enrollment is limited to students with a program in Athletic Training.

Enrollment limited to students with department of Exercise Sci & Athletic Train.

**EXSC 221 - Lower Extremity Pathology, Diagnosis and Manual Techniques in Athletic Training**

This course is designed to integrate cognitive and psychomotor knowledge, skills and abilities, and facilitate practical application of the psychomotor skills specific to competent diagnosis and management of various injuries, conditions and pathologies incurred to the lower extremity.

Prerequisites: ERS 117<sup>C</sup> or EXSC 117<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 4

Enrollment is limited to students with a program in Athletic Training.

Enrollment limited to students with department of Exercise Sci & Athletic Train.

**EXSC 222 - Fundamentals of Research in Athletic Training**

This course is designed to introduce a foundational knowledge of research, the types of research, and the role it plays in athletic training. Emphasis is placed on developing library research skills, identifying research, demonstrating basic scientific writing skills, and becoming a knowledgeable consumer of research in order to apply it in the clinical environment.

Credits: 3

Enrollment is limited to students with a program in Athletic Training.

Enrollment limited to students with department of Exercise Sci & Athletic Train.

**EXSC 230 - Stress Management**

This course examines intrapersonal and interpersonal stressors, the effect of stress on the body and the key concepts and theories of stress management. Effective stress evaluations and coping strategies for preventing and managing stress will be integrated. After taking this course, students will be able to demonstrate an understanding of the personal and societal impact of stress management.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

**EXSC 231 - Group Exercise Instruction**

This course provides opportunities for practical skills and instruction in various group exercise activities. Emphasis is placed on physiological principles related to group exercise, as well as choreography, safety and modification for diverse populations. Current group exercise trends and research are explored.

Prerequisites: ERS 201<sup>D</sup> or EXSC 201<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

**EXSC 241 - Upper Extremity Pathology, Diagnosis and Manual Techniques in Athletic Training**

This course is designed to integrate cognitive and psychomotor knowledge, skills and abilities, and facilitate practical application of the psychomotor skills specific to competent diagnosis and management of various injuries, conditions and pathologies incurred to the upper extremity.

Prerequisites: ERS 221<sup>C</sup> or EXSC 221<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 4

Enrollment is limited to students with a program in Athletic Training. Enrollment limited to students with department of Exercise Sci & Athletic Train.

**EXSC 250 - Medical Terminology**

This course is designed to provide the students with a basic understanding of the language of medicine. Emphasis is placed on basic medical word construction and medical language derivation related to health care.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**EXSC 277 - Integrative Approach to Athletic Training**

Integrate cognitive concepts into progressively higher functional and practical application. This integration is to be achieved after completion of selected athletic training classes and by direct supervision and mentoring.

Credits: 3

Enrollment is limited to students with a program in Athletic Training.

**EXSC 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**EXSC 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**EXSC 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**EXSC 300 - Research Methods in Exercise Science**

This course examines the scientific method and the role of research in developing knowledge in Exercise Science. Students develop skills to become critical consumers of research and other publicly disseminated information. Students design a data collection project using the concepts learned in the class. Grade of C or better is required in this course.

Prerequisites: (ERS 201<sup>C</sup> or EXSC 201<sup>C</sup>) and (ERS 202<sup>C</sup> or EXSC 202<sup>C</sup>) and STAT 152<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EXSC 301 - Aerobic Exercise Leadership**

This course provides opportunities for the development of practical skills to instruct and lead aerobic exercise. Emphasis is placed on construction of a session utilizing various equipment and modes based upon appropriate physiological theories and biomechanical principles. Safety, effectiveness, intensity monitoring and modifications will be addressed. Grade of C or better is required in this course.

Prerequisites: (ERS 201<sup>C</sup> or EXSC 201<sup>C</sup>) and (ERS 202<sup>C</sup> or EXSC 202<sup>C</sup>) <sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Exercise Science.

**EXSC 302 - Exercise Leadership: Resistance Training**

This course provides both the theoretical knowledge and practical skills to safely and effectively design and implement resistance training programs for health and sports performance. Emphasis is placed on physiological and biomechanical principles associated with resistance exercise techniques. Current trends and research in resistance training are explored. Grade of C or better is required in this course.

Prerequisites: (ERS 201<sup>C</sup> or EXSC 201<sup>C</sup>) and (ERS 202<sup>C</sup> or EXSC 202<sup>C</sup>) <sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Exercise Science.

**EXSC 304 - Current Issues in Esports Health and Society**

This course is designed to critically examine the current issues confronting esports and video gaming within our increasingly digitized global society, including topics relating to health, performance, and the latest trends in the esports industry.

Credits: 3

Thematic Thread(s): Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EXSC 305 - The Truth About Weight Loss**

This course provides the opportunity to understand how body weight is lost or gained in a healthy and sustainable way. Students will demonstrate understanding of fraudulent practices and products related to weight loss will be explored. Emphasis is placed on individualized practical approaches to weight management, and students will create behavior change strategies related to a personal weight management plan.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EXSC 307 - Concepts of General Medicine in Athletic Training**

This course is designed to integrate cognitive knowledge and abilities with the practical application of psychomotor skills specific to the assessment and management of general medical conditions. This course will provide foundational knowledge and application related to pharmacology.

Prerequisites: ERS 117<sup>C</sup> or EXSC 117<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 4

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EXSC 310 - Clinical Experiences in Athletic Training - II**

This course is designed to provide opportunities for students to apply previously acquired athletic training knowledge, skills and abilities in the clinical setting under the direct supervision of a program approved preceptor. Emphasis is placed on practicing and implementing the current NATA Education Competencies designated at Level II in the learning over time model.

Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Athletic Training.

**EXSC 317 - Therapeutic Modalities Theory and Techniques**

This course is designed to integrate cognitive knowledge and abilities with the practical application or psychomotor skills specific to the use of contemporary physical modalities. This course will provide foundational knowledge and application related to the indications, contraindications and methods of application.

Prerequisites: ERS 221<sup>C</sup> or EXSC 221<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 4

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Athletic Training.

**EXSC 320 - Clinical Experiences in Athletic Training - III**

This course is designed to provide opportunities for students to apply previously acquired athletic training knowledge skills and abilities in the clinical setting under the direct supervision of a program approved preceptor. Emphasis is placed on practicing and implementing the current NATA Education Competencies designated at Level III in the learning over time model.

Prerequisites: ERS 310<sup>C</sup> or EXSC 310<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Athletic Training.

Enrollment limited to students with department of Exercise Sci & Athletic Train.

**EXSC 327 - Therapeutic Modalities Procedures**

Familiarizes the athletic training student with the appropriate application and maintenance of therapeutic modalities. To be taken concurrently with EXSC 317.

Prerequisites: ERS 317 (may be taken concurrently)<sup>D</sup> or EXSC 317 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EXSC 337 - Physical Examination of the Athlete**

Presents knowledge and skills for orthopedic evaluation of the spine and extremities. Includes evaluation of the internal organs as well.

Prerequisites: (ERS 264<sup>D</sup> or EXSC 264<sup>D</sup>) or (ERS 101<sup>D</sup> or EXSC 101<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Athletic Training.

**EXSC 340 - Clinical Experiences in Athletic Training - IV**

This course is designed to provide opportunities at an increasing professional level for students to apply previously acquired athletic training knowledge, skills and abilities in the clinical setting under the direct supervision of a program approved preceptor. Students will practice and implement the current NATA Education Competencies designated at Level IV in the learning over time model.

Prerequisites: ERS 320<sup>C</sup> or EXSC 320<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Athletic Training.

Enrollment limited to students with department of Exercise Sci & Athletic Train.

**EXSC 347 - Therapeutic Rehabilitation in Athletic Training**

This course is designed to facilitate learning specific to the theory and application of therapeutic rehabilitation techniques for a diverse population. Emphasis is placed on the planning and implementation of therapeutic rehabilitation protocols for the prevention and/or care of various injuries.

Prerequisites: ERS 221<sup>C</sup> or EXSC 221<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 4

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Athletic Training.

**EXSC 350 - Advanced Application of Resistance Training**

This course is designed to address advanced theories in the application of resistance training. Selected activities will allow for the application of concepts to individuals with specific goals and considerations (e.g. athletes, diseased populations, etc.). Topics of consideration will include the location and analysis of peer-reviewed resources, individualized needs analysis and the selection of muscular fitness assessments, chronic adaptations to long-term resistance training, and long-term client development and periodization.

Prerequisites: ERS 302<sup>C</sup> or EXSC 302<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Summer & Winter Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EXSC 357 - Application of Therapeutic Techniques**

Enables students to develop the application of therapeutic techniques for the prevention of injury and/or care of the athlete. To be taken concurrently with EXSC 347.

Prerequisites: ERS 347 (may be taken concurrently)<sup>D</sup> or EXSC 347 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Athletic Training.

**EXSC 387 - Practicum in Athletic Training**

Provides educational experiences/assessments in the area of athletic training psychomotor domain, to be coordinated/supervised/mentored in a varied athletic training practicum (totaling a minimum of 1,000 hours). Students will establish/maintain portfolios, develop proper medical documentation and record keeping skills, and be provided opportunities for orthopedic surgery observation.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Athletic Training.

**EXSC 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EXSC 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EXSC 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EXSC 400 - Wellness coaching and Program Management**

This course examines the concepts of health, wellness and resilience. Emphasis placed on developing wellness coaching skills and the ability to utilize behavior change theories to develop wellness programming for individuals and groups. Fundamentals of business administration, as they relate to wellness programming, are also covered. Grade of C or better is required in this course.

Prerequisites: (ERS 300<sup>C</sup> or EXSC 300<sup>C</sup>) and (ERS 301<sup>C</sup> or EXSC 301<sup>C</sup>) and (ERS 302<sup>C</sup> or EXSC 302<sup>C</sup>) and BIOL 216<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Corequisite(s): EXSC 401, EXSC 402 and EXSC 403

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Exercise Science.



**EXSC 401 - Fitness Assessment**

This course provides practical experiences in the selection, administration, and interpretation of various health-related fitness tests. Emphasis is placed on proper technique and communication throughout the assessment process. Grade of C or better is required in this course.

Prerequisites: (ERS 300<sup>C</sup> or EXSC 300<sup>C</sup>) and (ERS 301<sup>C</sup> or EXSC 301<sup>C</sup>) and (ERS 302<sup>C</sup> or EXSC 302<sup>C</sup>) and BIOL 216<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Corequisite(s): EXSC 400, EXSC 402 and EXSC 403

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Exercise Science.

**EXSC 402 - Exercise Prescription**

This course provides the theoretical knowledge and practical skills to design personalized exercise programs that elicit specific physiologic responses and adaptations. Emphasis is placed on prescribing safe and effective individualized cardiorespiratory, musculoskeletal and weight management programs. Grade of C or better is required in this course.

Prerequisites: (ERS 300<sup>C</sup> or EXSC 300<sup>C</sup>) and (ERS 301<sup>C</sup> or EXSC 301<sup>C</sup>) and (ERS 302<sup>C</sup> or EXSC 302<sup>C</sup>) and BIOL 216<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Corequisite(s): EXSC 403

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Exercise Science.

**EXSC 403 - Advanced Exercise Physiology**

This course provides in depth inquiry into the acute responses and long term adaptations of the human body to various types of exercise from the cellular level to the entire system. Emphasis is placed on the physiological demands of exercise and exercising at terrestrial extremes. Laboratory included. Grade of C or better is required in this course.

Prerequisites: (ERS 300<sup>C</sup> or EXSC 300<sup>C</sup>) and (ERS 301<sup>C</sup> or EXSC 301<sup>C</sup>) and (ERS 302<sup>C</sup> or EXSC 302<sup>C</sup>) and BIOL 216<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Corequisite(s): EXSC 400, EXSC 401 and EXSC 402

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

Enrollment is limited to students with a program in Exercise Science.

**EXSC 407 - Healthcare Administration in Athletic Training**

Studies topics relevant to management, organization, administration, and professional development in the profession of athletic training. Topics will include discussions specific to diversity in the health care system.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Athletic Training.

Enrollment limited to students with the DEPT. EXER SCIENCE ACCEPTANCE attribute.

**EXSC 410 - Clinical Exercise Physiology**

This course examines cardiopulmonary exercise physiology, the pathophysiology of selected cardiovascular and respiratory diseases, cardiopulmonary rehabilitation, electrocardiography and clinical graded exercise testing. The influence of age, sex, culture, and ethnicity on risk factors for, prevalence of, and outcomes associated with selected cardiovascular and respiratory diseases are emphasized. Grade of C or better is required in this course.

Prerequisites: (ERS 400<sup>C</sup> or EXSC 400<sup>C</sup>) and (ERS 401<sup>C</sup> or EXSC 401<sup>C</sup>) and (ERS 402<sup>C</sup> or EXSC 402<sup>C</sup>) and (ERS 403<sup>C</sup> or EXSC 403<sup>C</sup>) and BIOL 217<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Corequisite(s): EXSC 411 and EXSC 412

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Exercise Science.

**EXSC 411 - Exercise Science: Special Populations and Conditions**

This course evaluates the impact of physical activity and exercise on youth, older adults, and individuals with various health conditions and controlled diseases. Changes that occur during growth, development, maturation and the aging process in relation to physical activity/ exercise are examined. Pathophysiology, disease management, medications, exercise testing, and acute responses and chronic adaptations of physical activity/exercise programs for individuals with various health conditions and controlled diseases are identified. Special considerations for health, disease, and physical activity / exercise programming for diverse populations are explored. Grade of C or better is required in this course.

Prerequisites: (ERS 400<sup>C</sup> or EXSC 400<sup>C</sup>) and (ERS 401<sup>C</sup> or EXSC 401<sup>C</sup>) and (ERS 402<sup>C</sup> or EXSC 402<sup>C</sup>) and (ERS 403<sup>C</sup> or EXSC 403<sup>C</sup>) and BIOL 217<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Corequisite(s): EXSC 410 and EXSC 412

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Exercise Science.

**EXSC 412 - Exercise Science: Senior Synthesis**

This course provides the opportunity to synthesize knowledge, skills and abilities in both classroom and supervised practical settings. Emphasis is placed on developing, implementing and evaluating comprehensive exercise programs for diverse clientele. Opportunities to enhance professional and personal development are provided. Valid CPR/AED certification and proof of professional liability insurance required. Grade of C or better is required in this course.

Prerequisites: (ERS 400<sup>C</sup> or EXSC 400<sup>C</sup>) and (ERS 401<sup>C</sup> or EXSC 401<sup>C</sup>) and (ERS 402<sup>C</sup> or EXSC 402<sup>C</sup>) and (ERS 403<sup>C</sup> or EXSC 403<sup>C</sup>) and (ERS 424 (may be taken concurrently)<sup>C</sup> or EXSC 424 (may be taken concurrently)<sup>C</sup>) and BIOL 217<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Corequisite(s): EXSC 410 and EXSC 411

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Exercise Science.

**EXSC 417 - Wellness and Reconditioning in Athletic Training**

This course is designed to facilitate learning specific to safe and effective health-related wellness screening, and the design and implementation of fitness programs for a diverse population. Incorporates theoretical knowledge and skills of health and wellness.

Prerequisites: ERS 117<sup>C</sup> or EXSC 117<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Athletic Training.

Enrollment limited to students with department of Exercise Sci & Athletic Train.

**EXSC 424 - Nutrition and Exercise**

This course provides an understanding of the dietary standards that dictate nutritional requirements for apparently healthy adults. Emphasis is placed on the evaluation of an recommendations for macronutrients, micronutrients, and hydration status for health, physical activity, and human performance. Grade of C or better is required in this course.

Prerequisites: (HLTH 314<sup>C</sup> or ERS 300<sup>C</sup> or EXSC 300<sup>C</sup>) and (ERS 301<sup>C</sup> or EXSC 301<sup>C</sup>) and (ERS 302<sup>C</sup> or EXSC 302<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students in the College of Health Professions college.

**EXSC 427 - Mastery in Athletic Training**

A capstone course that allows the student to synthesize and apply knowledge and skills of an entry-level athletic trainer in a comprehensive manner.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Athletic Training.

**EXSC 430 - Seminar in Strength and Conditioning**

This course analyzes advanced strength and conditioning theory and practice. Topics include musculoskeletal and cardiorespiratory physiology, metabolism and nutrition, acute responses to exercise and chronic adaptations to training, biomechanical concepts, measurement and evaluation, resistance training techniques, exercise prescription, speed development, and plyometric training. In addition, this course prepares students to take the Certified Strength and Conditioning Specialist (CSCS) examination provided by the National Strength and Conditioning Association (NSCA).

Prerequisites: ERS 302<sup>D</sup> or EXSC 302<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EXSC 431 - Health and Fitness in the Older Adult**

This course examines wellness promotion and health fitness programs for the older adult, particularly people age fifty and above. Emphasis is placed upon prevention or delay of chronic diseases or disorders.

Prerequisites: (ERS 401<sup>C</sup> or EXSC 401<sup>C</sup>) and (ERS 402<sup>C</sup> or EXSC 402<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EXSC 432 - Pediatric Exercise Science**

This course examines health, physical activity, and physical fitness status of children and adolescents. Physiological responses to exercise, methodologies for assessing physical fitness and physical activity, and promotion of physical activity are discussed. Current research in various topics related to exercise in children and adolescents are explored.

Prerequisites: (ERS 401<sup>C</sup> or EXSC 401<sup>C</sup>) and (ERS 402<sup>C</sup> or EXSC 402<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EXSC 434 - Physiology of Aging and Physical Activity**

This course examines the physiology of the aging process with emphasis on the effects of physical activity on health and on the degenerative process of aging. Emphasis is placed on the physiological responses to aging that are influenced by physical activity.

Prerequisites: (ERS 401<sup>C</sup> or EXSC 401<sup>C</sup>) and (ERS 402<sup>C</sup> or EXSC 402<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EXSC 435 - Exercise Programming for Cancer**

This course provides a foundation for an integration of knowledge and skills regarding the components of cancer, cancer treatments, and the concepts of rehabilitating cancer patients using exercise interventions. Emphasis is placed on physiological alterations that occur during and following cancer therapy and the effects that exercise has on eliminating or reducing these effects. Opportunities to develop individualized exercise programs for cancer patients will be provided.

Prerequisites: (ERS 201<sup>C</sup> or EXSC 201<sup>C</sup>) and (ERS 301<sup>C</sup> or EXSC 301<sup>C</sup>) and (ERS 302<sup>C</sup> or EXSC 302<sup>C</sup>) and (ERS 402<sup>C</sup> or EXSC 402<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**EXSC 450 - Exercise Science Internship**

This course provides the opportunity for students to develop and apply exercise science knowledge, skills, and abilities in a supervised university approved setting. Valid CPR/AED certification and proof of professional liability insurance required. Grade of C or better is required in this course

Prerequisites: (ERS 400<sup>C</sup> or EXSC 400<sup>C</sup>) and (ERS 401<sup>C</sup> or EXSC 401<sup>C</sup>) and (ERS 402<sup>C</sup> or EXSC 402<sup>C</sup>) and (ERS 403<sup>C</sup> or EXSC 403<sup>C</sup>) and (ERS 410<sup>C</sup> or EXSC 410<sup>C</sup>) and (ERS 411<sup>C</sup> or EXSC 411<sup>C</sup>) and (ERS 412<sup>C</sup> or EXSC 412<sup>C</sup>) and (ERS 424<sup>C</sup> or EXSC 424<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3-12

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Exercise Science.

**EXSC 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EXSC 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**EXSC 497 - Clinical Synthesis in Athletic Training**

This course provides the students with decision-making opportunities to synthesize and integrate all previously acquired athletic training knowledge, skills and abilities in the classroom and clinical setting under the direct supervision of a program approved preceptor. Students will practice and implement all the current NATA Education Competencies designated at the clinical integration proficiency level.

Prerequisites: ERS 340<sup>C</sup> or EXSC 340<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Athletic Training.

Enrollment limited to students with department of Exercise Sci & Athletic Train.

**EXSC 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Exploratory Studies and Academic Progress (ESAP)

**ESAP 101 - FYRST Seminar**

The FYRST Seminar provides students with an opportunity to become integrated into the university's community of learners by exploring the purpose and value of higher education, participating in the teaching/learning process, addressing academic and social transition issues, utilizing campus programs, services, and technology, and developing academic skills and learning strategies during the student's first semester at Slippery Rock University. This course is a one credit hour course designed to especially and exclusively assist first year students in their adjustment to college life at Slippery Rock University. No prerequisite. Enrollment by advisement. Open to first year students only. The credit earned in this course counts for graduation requirements.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

**ESAP 102 - Learning Strategies**

Students will develop effective learning strategies, goals, and decision-making skills with a view toward implementing a plan to remove their probationary status and become a student in "good academic standing." This course is primarily for students on academic probation (other students may enroll with the permission of the instructor). Credits earned count for graduation as an elective.

Credits: 1

Term(s) Typically Offered: Offered as Needed

**ESAP 103 - Major and Career Exploration**

This course will examine various decision making models as they are applied to choosing an academic major and/or career. Through a variety of in-class and out-of-class activities students will integrate self-knowledge and knowledge about majors and the world of work.

Credits: 1

Term(s) Typically Offered: Offered as Needed

**ESAP 109 - Developmental Mathematics**

This course covers basic arithmetic skills necessary for successful completion of basic algebra. Topics include basic operations using whole numbers, fractions and decimals, ratios and proportions, percents, and solving equations. Students not exempted from ACSD 109 must successfully complete this course before enrolling in ACSD 110. Students must pass a standard proficiency exam to pass this course. Course grading: A, B, C, or NC. Credit earned in this course will not count toward the university's 120 credit hour minimum required for graduation.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**ESAP 110 - Beginning Algebra**

An overview of introductory algebra concepts, this course covers topics such as: simplifying variable expressions, solving equations and applications problems, simplifying polynomials, factoring, algebraic fractions, graphing linear equations, solving systems of linear equations, and simplifying radical expressions. Students who are placed into this course are expected to possess certain minimum competencies in arithmetic skills, and they must pass a standard proficiency exam to pass this course. Course grading: A, B, C, or NC. Prerequisite: ACSD 109 or exemption from ACSD 109. Credit earned in this course will not count toward the university's 120 credit hour minimum required for graduation.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer

**ESAP 111 - Designing Your Life: Building a Life and Career with Meaning and Purpose**

What if there were a class to help you explore the bigger issues of finding your way to a career and life you'll love. The Designing Your Life course offers a framework, tools, and a community of peers and mentors where we'll work on these issues through a design thinking approach. All students, regardless of your plans, interests, or goals, can benefit from this constructive, creative, and effective approach to finding and designing your life and vocation.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**ESAP 121 - Freshman Research and Mentoring**

The FRAME Seminar introduces students to academic research skills. Students will collaborate with faculty mentors, peers and professionals to develop skills in methodologies, analyses and dissemination of scholarly work. The seminar course is intended for second semester freshman.

Prerequisites: INDS 101<sup>D</sup> or ESAP 101<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

**ESAP 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**ESAP 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ESAP 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**ESAP 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ESAP 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ESAP 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**ESAP 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ESAP 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ESAP 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1, Freshman 2 or Sophomore 1.

**ESAP 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ESAP 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ESAP 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ESAP 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Finance (FIN)

**FIN 100 - Personal Financial Planning**

All individuals encounter challenging financial decisions. This course will introduce a wide variety of topics, such as cash and debt management, credit rating, insurance policies, housing decisions, taxes, investments, retirement, and estate planning. In addition, students will apply financial planning principles to diverse populations.

Credits: 3

Term(s) Typically Offered: Offered Winter, Spring&Summer

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

**FIN 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**FIN 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**FIN 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**FIN 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**FIN 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed



**FIN 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**FIN 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**FIN 303 - Issues in Global Business**

This course will focus on fundamental issues in the modern globalization of business. The topics covered will include the cultural environments in which business work, politics and law in global business, economic integration, global trade and investment, global finance, global operations and managing global businesses. A special emphasis will be placed on the challenges and opportunities presented to global businesses by the social, political and economic diversity encountered in the global marketplace.

Prerequisites: ECON 201<sup>D</sup> and ECON 202<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 304 - Money and Banking**

Emphasis is upon monetary policy, how it is implemented, the theories on which it is based, and the implication of this policy on our economy.

Prerequisite: ECON 201<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 318 - Intermediate Statistical Analysis**

Statistical analysis encompassing multiple regression and correlation, ANOVA (simple and multivariate), goodness of fit, statistical decision analysis, and advanced forecasting techniques.

Prerequisites: ECON 219<sup>D</sup> or MGMT 219<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 320 - Managerial Finance**

Capital budgeting, cost of capital, management of short and long term assets, mergers and financial reorganization.

Prerequisite: ACCT 209<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall, Winter, & Spring

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 321 - Investments**

Introduction to security markets and their operation; investment alternatives; fundamentals of investment analysis.

Prerequisite: FIN 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 322 - Bank Financial Management**

Principles of bank financial management including sources and uses of funds and the role of the bank in financial markets.

Prerequisite: FIN 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 323 - Financial Markets and Institutions**

Introduction to financial markets and institutions and to their role in financing business, consumers and government.

Prerequisite: FIN 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall, Winter, & Spring

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 326 - Intermediate Corporate Finance**

This course provides in-depth analysis of topics addressed in corporate finance and covers additional advanced topics including but not limited to real asset valuation, corporate governance, short-term financial management, and mergers and acquisitions.

Prerequisite: FIN 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 329 - Principles of Insurance**

A study of the basic principles of insurance and risk. Topics include property and liability insurance; the financial structure and organization of insurance business, and the different fields of insurance.

Prerequisite: FIN 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 340 - Real Estate Investment**

The study of the nature and scope of real estate investment, investment decision process and investment strategy, financial and risk analysis, tax implications, institutional real estate investment and real estate investment trust funds.

Prerequisite: FIN 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 341 - Entrepreneurial Finance**

Entrepreneurial finance is the application and adaptation of financial tools and techniques to the planning, funding, operation, valuation and harvesting of entrepreneurial ventures.

Prerequisite: FIN 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 409 - Retirement and Estate Planning**

In-depth study of the tools and techniques available for use in retirement and estate planning from a personal financial planning perspective. Particular emphasis will be given to retirement cash flow analysis and planning as well as the transfer tax system inherent in estate planning and the methods available for estate management.

Prerequisites: FIN 321<sup>D</sup> and FIN 329<sup>D</sup> and ACCT 308<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 410 - Personal Financial Planning Seminar**

Synthesize the topics requisite to expertise in personal financial planning as explored principally through case studies. These topics include risk management, investment, insurance and tax planning, and retirement and estate planning.

Prerequisites: FIN 321<sup>D</sup> and FIN 329<sup>D</sup> and ACCT 308<sup>D</sup> and FIN 409<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 420 - Finance Seminar**

Capital budgeting, cost of capital, capital structure, working capital management and long-term financing.

Prerequisite: FIN 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 421 - Portfolio Theory**

Advanced treatment of investment concepts. In-depth analysis of Modern Portfolio Theory, Capital Asset Pricing Model (CAPM) and its extensions, options, interest options, future markets and precious metals.

Prerequisite: FIN 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 427 - International Financial Management**

International monetary systems, sources of funds, import and export financing; taxation of multinational corporations, foreign investment decisions; political risk; risk of foreign exchange losses; management of working capital.

Prerequisite: FIN 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 430 - International Banking**

Internationalization of U.S. and foreign banks to meet the global financial needs of multi-national activities.

Prerequisites: FIN 320<sup>D</sup> and FIN 323<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 450 - Internship**

Supervised placement and research in selected public and private agencies at appropriate institutions. Course listed as 1-12 credits, 3 credits are recommended.

Credits: 1-12

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 490 - Independent Study**

In-depth reading and/or research in an area of particular interest to the student, done with the guidance of a faculty member. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FIN 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## French (FREN)

**FREN 101 - French Language and Culture I**

This course is the first in a three course series which will provide an introduction to the French language.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

**FREN 102 - French Language and Culture II**

This course is the second in a three course series which will provide an introduction to the French language.

Prerequisites: minimum score of 15 in 'Placement in FREN102' or FREN 101<sup>D</sup> or minimum score of 233 in 'Placement in FREN102'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

**FREN 103 - French Language and Culture III**

This course is the third in a three course series which will provide an introduction to the French language.

Prerequisites: (minimum score of 25 in 'French - SRU Placement Exam' or minimum score of 25 in 'Placement in FREN103') or FREN 102<sup>D</sup> or minimum score of 318 in 'Placement in FREN103'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

**FREN 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**FREN 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**FREN 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**FREN 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**FREN 201 - French Conversation 1**

A functional course in speaking and writing French, stressing everyday vocabulary and sentence structure. Some grammar review.

Prerequisites: FREN 103<sup>D</sup> or minimum score of 35 in 'Placement in FREN200 level' or minimum score of 386 in 'Placement in FREN200 level'  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**FREN 215 - Topics in French and Francophone Culture**

This course provides deeper knowledge of French and Francophone culture by examining selected topics in French and Francophone culture. This course is taught in English.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

**FREN 220 - Reading in French**

An introduction to reading in French at the intermediate level.

Prerequisites: FREN 103<sup>D</sup> or minimum score of 35 in 'Placement in FREN200 level' or minimum score of 386 in 'Placement in FREN200 level'  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**FREN 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**FREN 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**FREN 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**FREN 300 - French Grammar and Composition 1**

An intermediate grammar review course emphasizing the basic structure of French.

Prerequisites: minimum score of 45 in 'Placement in FREN300 level' or FREN 201<sup>D</sup> or FREN 220<sup>D</sup> or minimum score of 447 in 'Placement in FREN300 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FREN 301 - French Conversation 2**

Development of French vocabulary and conversation skills through intensive study of selected theme areas.

Prerequisites: FREN 201<sup>D</sup> or FREN 220<sup>D</sup> or minimum score of 45 in 'Placement in FREN300 level' or minimum score of 447 in 'Placement in FREN300 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FREN 303 - Professional French**

Designed to acquaint the student with formal registers and formulas of communication used in all professional communication in the French-speaking world.

Prerequisites: FREN 220<sup>D</sup> or FREN 201<sup>D</sup> or minimum score of 45 in 'Placement in FREN300 level' or minimum score of 447 in 'Placement in FREN300 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FREN 305 - France through the Ages**

An advanced course in the study of the development of French civilization from the earliest times to the end of the 19th century.

Prerequisites: FREN 201<sup>D</sup> or FREN 220<sup>D</sup> or minimum score of 45 in 'Placement in FREN300 level' or minimum score of 447 in 'Placement in FREN300 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FREN 306 - France and Francophone Identities Today**

An exploration of diverse voices, social groups and societies in francophone literatures through works by francophone writers from all over the world. Designed as an introduction to the literatures and cultures of the francophone world, this course considers issues of social status, history, resistance, representation and identity. Taught in French.

Prerequisites: FREN 220<sup>D</sup> or FREN 201<sup>D</sup> or minimum score of 45 in 'Placement in FREN300 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Thematic Thread(s): Human Diversity & Well-Being, Transfer Thread

Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FREN 315 - French Study Abroad**

This course is designed for students who wish to study French/ Francophone society firsthand. Students will study the culture, literature, history, art, and other issues concerning the country where the program is offered.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FREN 320 - Main Currents in French Literature**

An introduction to the study of French literature through prose, drama and poetry.

Prerequisites: FREN 201<sup>D</sup> or FREN 220<sup>D</sup> or minimum score of 45 in 'Placement in FREN300 level' or minimum score of 447 in 'Placement in FREN300 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FREN 330 - French Literature from the 18th Century to the Present**

Representative works and literary movements in French literature from the eighteenth century to the present will be studied.

Prerequisites: FREN 201<sup>D</sup> or FREN 220<sup>D</sup> or minimum score of 447 in 'Placement in FREN300 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FREN 350 - French Linguistics and Phonetics**

An introduction to general linguistics and the practical application of phonetics to the study of French. Analysis and practice of the sound system of the foreign language.

Prerequisites: FREN 201<sup>D</sup> or FREN 220<sup>D</sup> or minimum score of 45 in 'Placement in FREN300 level' or minimum score of 447 in 'Placement in FREN300 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FREN 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FREN 395 - Workshop**

Special topics of interest to undergraduates and selected community members. A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FREN 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FREN 400 - French Grammar and Composition 2**

An advanced course in the study of French grammar and usage.

Prerequisite: FREN 300<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FREN 401 - French Conversation 3**

This course will provide the opportunity for advanced students to improve their aural comprehension and their conversation abilities in French.

Prerequisites: FREN 301<sup>D</sup> and FREN 300<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**FREN 402 - Eighteenth-Century Novel**

A study of the Age of Enlightenment as reflected in the novel.

Prerequisites: FREN 301<sup>D</sup> and (FREN 300<sup>D</sup> or FREN 303<sup>D</sup> or FREN 305<sup>D</sup> or FREN 306<sup>D</sup> or FREN 320<sup>D</sup> or FREN 330<sup>D</sup> or FREN 350<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FREN 403 - Nineteenth-Century French Literature**

Readings from the romantic, realistic and naturalistic movements.

Prerequisites: FREN 301<sup>D</sup> and (FREN 300<sup>D</sup> or FREN 303<sup>D</sup> or FREN 305<sup>D</sup> or FREN 306<sup>D</sup> or FREN 320<sup>D</sup> or FREN 330<sup>D</sup> or FREN 350<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FREN 404 - Exploring French Culture through Media**

A study of various aspects of modern French literature.

Prerequisites: FREN 301<sup>D</sup> and (FREN 300<sup>D</sup> or FREN 303<sup>D</sup> or FREN 305<sup>D</sup> or FREN 306<sup>D</sup> or FREN 320<sup>D</sup> or FREN 330<sup>D</sup> or FREN 350<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FREN 411 - Literature of the Classical Period**

A study of French Classicism, emphasizing the plays of Corneille, Moliere and Racine.

Prerequisites: and (FREN 300<sup>D</sup> or FREN 303<sup>D</sup> or FREN 305<sup>D</sup> or FREN 306<sup>D</sup> or FREN 320<sup>D</sup> or FREN 330<sup>D</sup> or FREN 350<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FREN 430 - French Literature 12th to 17th Century**

Representative works and literary movements in French Literature from the 12th through the 17th centuries will be studied.

Prerequisite: FREN 300<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FREN 490 - Independent Study**

Students have an opportunity to study selected areas in greater concentration. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FREN 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**FREN 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Gender Studies (GNDR)

**GNDR 115 - Introduction to Gender Studies**

Introduction to Gender Studies is an interdisciplinary course that offers a foundation for an intersectional analyses of gender within the context of systems and structures of power and oppression.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**GNDR 120 - Introduction to the Study of Masculinities**

This course proposes to introduce and explore the topic of masculinity as a subject for critical study. In the course, students will read about and discuss how masculinities are constructed, presented and reproduced in media and popular culture. This course is meant for and open to everyone interested in taking a critical approach to the study of gender in societies, with specific focus on how (especially american) masculinities shape and are shaped by identity, culture, media, war, politics and economics.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

Thematic Thread(s): Transfer Thread Completion Course

**GNDR 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**GNDR 180 - Disability and Social Justice**

This course focuses broadly on elements of disability to analyze and deconstruct the history, politics, and culturally influenced production of "disability" and of disablement as a social justice concern.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**GNDR 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**GNDR 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**GNDR 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**GNDR 280 - Introduction to Disability Studies**

An introduction to the field of Disability Studies, which rejects medical paradigms and instead analyzes disability as a social, cultural and ideological phenomenon, with an intersectional and interdisciplinary focus on gender, race and socioeconomic status.

Credits: 3

**GNDR 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**GNDR 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**GNDR 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**GNDR 340 - Applied Queer Studies**

An introduction to the field of queer studies with an applied focus (on gender, race, disability, age, ethnicity, transactional issues) in an intersectional and interdisciplinary context. The course analyzes the historical, cultural, political and discursive production of LGBTQAI+ identities, heteronormativity as a form of control, and LGBTQAI+ activism and advocacy.

Prerequisite: GNDR 115<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

**GNDR 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GNDR 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GNDR 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GNDR 400 - Gender Studies and Porn Culture**

Integrating feminist, sociological, media, marketing, neurological, and philosophical perspectives, the course analyzes the social implications of porn consumption, porn production and methods of porn distribution, including technological developments (for example, 3D software development and the use of artificial intelligence in sex dolls). While gender organizes the analytic approaches of the course, it considers other embodied and intersectional identities as well.

Prerequisite: GNDR 115<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

**GNDR 415 - Feminist Perspectives in the Disciplines**

This course will explore feminist approaches to pedagogy and research in the humanities, social sciences, and natural sciences, highlighting how such approaches reshape and redirect the ways knowledge is constructed as well as the attendant, transformed results.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GNDR 450 - Gender Studies Internship**

Professional experiences, such as working with the Girl Scouts or state National Organization for Women (NOW), or working in a women's center or abuse/sexual assault center, that will allow students to either apply or function within a feminist framework to understand the complexity of women's lives and contribute to women's opportunities.

Credits: 1-12

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GNDR 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GNDR 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GNDR 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Geography/Environmental Studies (GES)

**GES 105 - World Regional Geography**

This course provides an introduction to the regional concept, classification of major culture regions throughout the world and a description of the physiocultural character of those regions.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**GES 115 - Introduction to Geospatial Technologies**

Provides fundamental concepts and basic skills regarding map use and interpretation. Overview of major geospatial technologies, including geographic information systems, global positioning systems, spatial visualization, and remote sensing.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

**GES 135 - Introduction to Environmental Problems**

An introduction to some of the more crucial environmental problems and alternative solutions that are available.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

**GES 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**GES 150 - The Natural Environment**

An introduction to interrelationships among the physical elements of the environment, including the study of vegetation, soils and landforms.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment is limited to students with a program in Environmental Studies or Geography.

**GES 170 - Discover Geography**

An inquiry course that examines why people live differently in different parts of the world, with respect to political and economic systems, culture, demographics, and relationships with the natural world. This course introduces students to topics and methods of human geography, and enables students to apply them to addressing important global, regional, and local social issues.

Credits: 3

Term(s) Typically Offered: Offered Every Term

**GES 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**GES 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**GES 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**GES 201 - Latin America and the Caribbean**

Consideration is given to physical, historical, cultural, political, and economic patterns in Latin America and the Caribbean.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**GES 202 - United States and Canada**

An introductory course that surveys the patterns, connections, and evolution of environments, cultures, and economies of the U.S. and Canada.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**GES 204 - Post-Soviet Union**

Study of the Soviet Union and Soviet-bloc nations with emphasis on economic, physical, political, and cultural aspects.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**GES 205 - Cultural Geography**

This course serves as an introduction to human, social and cultural geography. Course content will cover cultural landscapes and place identity, discourses and cultural interpretation of the environment, the cultural and spatial impacts of demographic and economic changes, and cultural contestation over space and place.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

**GES 215 - Planning for Sustainable Communities**

An introduction to social and physical planning for rural areas, towns and cities.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course

**GES 220 - General Methods of Fieldwork**

A survey of how field research is done in geography, including designing a research question, data collection techniques, and qualitative and quantitative data analysis.

Prerequisite: GES 115 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**GES 235 - Conservation**

An examination of the earth's complex resource base which places special emphasis on the geographic location of resources and on conservation/preservation practices.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Transfer Thread Completion Course

**GES 242 - Geography of Religion**

The distribution and arrangement of world religions, giving consideration to the comparative influence of religion on the cultural landscape and on regional development.

Credits: 3

**GES 245 - Population and Resources**

Basic demographic principles and their relationship to regional development.

Credits: 3

**GES 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**GES 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**GES 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**GES 301 - Geography of Rural Areas**

Analyzes the structure and primary functional patterns of rural areas, with an emphasis on agricultural and industrial land use, problems of rural development, and population shifts.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 303 - Asia**

A survey of the major regions of Asia emphasizing their physical, cultural, and political characteristics. Several countries are selected for special emphasis.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Thematic Thread(s): Human Diversity & Well-Being, Transfer Thread

Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 305 - Environmental Economic Geography**

Environmental economic geography takes a geographical approach to the interface between nature and the economy, with an emphasis on patterns and trends in environmental services and resource management.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 307 - Australia**

This course will introduce students to the environments and peoples of Australia. Australia's natural environment, Aboriginal and white culture, economy, politics, and major current public issues will be covered.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 308 - Europe**

The evolution of nations, the cultural landscape, and the spatial-economic organization of Europe.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 309 - Africa**

This course surveys the patterns, connections, and evolution of environments, cultures, nations, and economies of Africa, with an emphasis on maps, regions, and images.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 310 - Urban Geography**

The course is designed to provide insights into the nature of cities and smaller urban places.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 315 - Cartography I**

Basic elements of computer-assisted thematic map design are discussed. Cartographic projects serve as a means of applying major concepts such as map projections, data classification, color theory, and qualitative/quantitative symbology. Includes a lab.

Prerequisite: GES 115<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 321 - Introduction to UAS for Remote Sensing and Monitoring**

This course introduces students to Unmanned Aerial Systems and their use in acquisition of remotely sensed data. Course content will cover topics necessary for students to sit for the FAA Part 107 Commercial Remote Pilot Certification examination. Students will also be introduced to basic concepts of remote sensing and aerial imaging, UAS mission planning and spatial data processing.

Prerequisite: GES 115<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1 or Freshman 2 may **not** enroll.

**GES 324 - Environmental Law and Policy**

The study of political control of the environment. Focus on the roles played by individuals and groups. Cross-listed with POLS 324.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 325 - Introduction to Geographic Information Science**

This course introduces students to integrated computer tools for the capture, storage, manipulation, analysis, and printout of earth-referenced data. Computers are used to store maps, analyze maps, and produce new maps along with their attributes to address societal issues. Includes a lab.

Prerequisite: GES 115<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Transfer Thread Completion Course

Students with a semester level of Freshman 1 or Freshman 2 may **not** enroll.



**GES 330 - Political Geography**

The effects of politics on geography and the effects of geographic factors on politics.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 331 - Economic Geography**

Examines human use and economic organization of the earth.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 344 - Environmental Justice**

This course will teach students to evaluate situations as just or unjust according to well-understood principles of environmental justice. Students will apply this analysis to important environmental justice topics such as unequal distribution of environmental harms and resources, treatment of indigenous people, animal and ecosystem rights and international environmental negotiations.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 345 - Population Analysis**

A study of the techniques of population analysis with respect to growth, distribution, fertility, migration, and other demographic characteristics. Some background in algebra or statistics.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 355 - Earth's Changing Climate**

This course examines the interrelationship between climate and human activities. We will study the processes that control Earth's climate with a focus on the flow of energy through the Earth system and a study of the interactions between the atmosphere, the ocean, and the land surface. We will investigate climate change on variable time scales with a focus on how climate affects humans and the environment. Further, we will examine which factors influence society's decisions in response to climate change.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 356 - Earth's Changing Climate Laboratory**

This course examines Earth's climate changes through an investigation of climate data and climate models. We will investigate climate change on variable time scales and in different geographic regions with a quantitative focus.

Prerequisite: GES 355 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Geography, Geology & Environm.

**GES 361 - Gender and the Environment**

Gender and the Environment will explore the ways that human interaction with the natural environment is shaped by gender roles and gender inequality in cultures around the world. Topics covered will include gender differences in resource access, connections between environmental degradation and women's oppression, cultural metaphors that link nature and gender (e.g. "mother earth") and the way that gender shapes environmental movements.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Thematic Thread(s): Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 362 - Applications in Sustainability**

This course explores the history of the sustainability movement, and the current and emerging science and practices of sustainability. Students will also be introduced to the research tools and methods needed to evaluate the sustainability of energy systems, technology, the built environment and environmental regulations and policy.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 363 - Energy and Society**

Students will develop a working knowledge of energy technologies and policies, and their impacts on both the environment and society. Discussions and case studies will include analysis of current and emerging energy sources and consumption.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 375 - Geography of Intolerance**

Analyzes cross-culturally the impact on resource allocation and the spatial implications of gender, racial, religious, political and class discrimination.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 410 - Remote Sensing**

Covers the electromagnetic and thermal properties of earth objects, principles and operations of sensors, and the practical applications of remote sensing. Lectures will be supplemented with exercises requiring computer processing of satellite data.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 415 - Cartography II**

Advanced issues and theory of cartographic design are discussed. Cartographic applications include flow maps, bivariate statistical mapping, cartograms, interactive maps, and map animation. Includes a lab.

Prerequisite: GES 315<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 420 - Historical Geography of Anglo-America**

A study of settlement patterns, land utilization, and sequent occupancies for selected periods since 1500. A student is expected to have background in geography and American history.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 425 - Advanced Geographic Information Systems**

This course investigates and applies advanced Geographic Information Systems (GIS) techniques. Students will learn current techniques for the collection, evaluation, input, analysis, and output of spatial data with various GIS tools. Students will apply these techniques to real world problems in areas such as environmental monitoring, environmental modeling, urban planning, and economic location. Includes a lab.

Prerequisites: (GES 325<sup>D</sup> or GES 410<sup>D</sup>) and GES 315<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 426 - Environmental Modeling**

Environmental models quantify processes such as runoff generation, water pollution, erosion, landscape change, and change of biodiversity. In this course, these models will be applied to real-world examples. Includes a lab.

Prerequisite: GES 325<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 435 - Preservation Planning**

A study of the American preservation movement as it relates to features of the cultural landscape. The origin and diffusion of building styles and the methods and problems associated with their preservation are emphasized.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 444 - World Environmental Cultures**

Students will explore and evaluate geographic and environmental ideas from western and non-western cultures.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Thematic Thread(s): Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 445 - Regional Planning**

Deals with planning for the future of regions that are larger than any single local government. Consideration is given to economic development, land use, transportation, and other regional planning concerns. Cross-listed with PUBA 445.

Prerequisites: GES 215<sup>D</sup> or PUBA 215<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 450 - Internship**

Supervised placement and field experience in a selected public or private agency.

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 469 - Field Investigations in the Geosciences**

This course will provide students with the opportunity to practice the nature of fieldwork by observing, interpreting, collecting data and analyzing physical and human landscapes, and the natural, cultural and economic forces that are shaping them.

Credits: 1-3

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 489 - Applied Geospatial Technologies**

This course involves the application of geospatial technologies in humanities, social sciences, and natural and environmental sciences.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 490 - Independent Study**

In-depth reading and/or research with the guidance of a faculty member in an area selected by the student. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**GES 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GES 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## German (GERM)

**GERM 101 - German Language and Culture I**

This course is the first in a three course series which will provide an introduction to the German language.

Credits: 3

Thematic Thread(s): Transfer Thread Completion Course

**GERM 102 - German Language and Culture II**

This course is the second in a three course series which will provide an introduction to the German language.

Prerequisites: (minimum score of 11 in 'Placement in GERM102' or minimum score of 21 in 'Placement in GERM103') or GERM 101<sup>D</sup> or minimum score of 264 in 'Placement in GERM102'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Thematic Thread(s): Transfer Thread Completion Course

**GERM 103 - German Language and Culture III**

This course is a third in a three course series which will provide an introduction to the German language.

Prerequisites: minimum score of 21 in 'Placement in GERM103' or GERM 102<sup>D</sup> or minimum score of 343 in 'Placement in GERM103'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Thematic Thread(s): Transfer Thread Completion Course

**GERM 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**GERM 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

**GERM 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

**GERM 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

**GERM 201 - Communication in German**

A functional course in speaking and writing German, stressing everyday vocabulary and sentence structure.

Prerequisites: GERM 103<sup>D</sup> or minimum score of 31 in 'Placement in GERM200 level' or (GERM 101<sup>D</sup> and GERM 102<sup>D</sup> and GERM 103<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

**GERM 210 - German Literature in Translation**

A study of representative German literary works, emphasizing the persons and ideas which have influenced German foreign literatures. The course will be given in English; no knowledge of German required. For non majors.

Credits: 3

**GERM 220 - Reading in German**

An introduction reading in German at the intermediate level.

Prerequisites: GERM 103<sup>D</sup> or minimum score of 35 in 'Placement in GERM200 level' or minimum score of 425 in 'Placement in GERM200 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

**GERM 255 - German Civilization I**

Course taught by Clarion University of PA faculty via ITV

Credits: 3

**GERM 257 - German Immersion**

This course, offered in Germany, introduces students first-hand to German culture, including aspects of everyday life in Germany. Course facilitates understanding of Germany's history and civilization through study of important monuments and urban design.

Prerequisites: GERM 103<sup>D</sup> or minimum score of 35 in 'Placement in GERM200 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

**GERM 260 - German Short Story**

Course taught by Clarion University of PA faculty via ITV

Credits: 3

**GERM 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

**GERM 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

**GERM 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

**GERM 300 - German Grammar Review**

An intermediate grammar review course, emphasizing the basic structures of German.

Prerequisites: GERM 201<sup>D</sup> or GERM 220<sup>D</sup> or minimum score of 41 in 'Placement in GERM300 level' or minimum score of 512 in 'Placement in GERM300 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GERM 303 - Business German**

A study of the German language as related to business and commerce. A consideration of the form and language of the business letter in German.

Prerequisites: GERM 201<sup>D</sup> or GERM 220<sup>D</sup> or minimum score of 45 in 'Placement in GERM300 level' or minimum score of 512 in 'Placement in GERM300 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GERM 305 - German Civilization**

A study of the development of German civilization from its earliest beginnings to its modern times. Course is for majors and non-majors.

Prerequisites: GERM 201<sup>D</sup> or GERM 220<sup>D</sup> or minimum score of 45 in 'Placement in GERM300 level' or minimum score of 512 in 'Placement in GERM300 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GERM 306 - Modern German Civilization**

A study of the civilization of German-speaking areas in the twentieth century.

Prerequisites: GERM 220<sup>D</sup> or GERM 201<sup>D</sup> or minimum score of 45 in 'Placement in GERM300 level' or minimum score of 512 in 'Placement in GERM300 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GERM 307 - German Conversation and Composition 1**

Course developing student abilities in listening, speaking and writing German. Emphasis is on discussions of student compositions on a variety of issues relating to modern Germany.

Prerequisites: GERM 220<sup>D</sup> or minimum score of 45 in 'Placement in GERM300 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### **GERM 308 - German Conversation and Composition 2**

Course developing student abilities in listening, speaking and writing German. Emphasis is on discussions of student compositions on a variety of issues relating to modern German.

Prerequisite: GERM 307<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### **GERM 320 - Main Currents in German Literature**

An introduction to the study of German literature through prose, drama, and poetry.

Prerequisites: GERM 201<sup>D</sup> or GERM 220<sup>D</sup> or minimum score of 45 in 'Placement in GERM300 level' or minimum score of 512 in 'Placement in GERM300 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### **GERM 350 - German Linguistics and Phonetics**

An introduction to general linguistics and the practical application of linguistics to the study of German, ANalysis and practice of the sound system of the foreign language.

Prerequisites: GERM 201<sup>D</sup> or GERM 220<sup>D</sup> or minimum score of 45 in 'Placement in GERM300 level' or minimum score of 512 in 'Placement in GERM300 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### **GERM 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### **GERM 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### **GERM 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### **GERM 400 - Advanced Grammar**

An advanced course in the study of German grammar and usage.

Prerequisite: GERM 300<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### **GERM 411 - Contemporary German Literature**

A study of the outstanding authors writing in German in the twentieth century.

Prerequisites: GERM 300<sup>D</sup> and (GERM 303<sup>D</sup> or GERM 305<sup>D</sup> or GERM 306<sup>D</sup> or GERM 307<sup>D</sup> or GERM 308<sup>D</sup> or GERM 320<sup>D</sup> or GERM 350<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### **GERM 490 - Independent Study**

Students have the opportunity to study selected areas in greater concentration. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### **GERM 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### **GERM 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



# Gerontology (GERO)

## GERO 139 - Foundations of Academic Discovery

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

## GERO 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## GERO 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

## GERO 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## GERO 265 - Aging and the Older Person

Introduction to the interdisciplinary study of gerontology as a social, behavioral and biological science. A prerequisite to courses in gerontology and aging. Women and Aging examines the effects of women growing older in a changing society. Social, psychological, physical, economic, cultural, and political implications will be discussed, including health concerns, changing roles, and discrimination.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course  
Students with a semester level of Freshman 1 may **not** enroll.

## GERO 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1 may **not** enroll.

## GERO 295 - Workbook

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1 may **not** enroll.

## GERO 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1 may **not** enroll.

## GERO 390 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## GERO 395 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## GERO 398 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## GERO 414 - Death and Dying

This course is an introduction to the study of death, dying and bereavement which utilizes a multidisciplinary approach. This course is aimed at sensitizing students to the subject of dying, death and bereavement, aiding students in adjusting to the death of a significant other, helping students examine their feeling and reactions to death and grieving and introducing students to diverse perspectives.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**GERO 425 - Women and Aging**

Examines the effects of women growing older in a changing society. Social, psychological, physical, economic, cultural, and political implications will be discussed, including health concerns, changing roles, and discrimination.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**GERO 450 - Gerontology Internship**

Individually designed experiential learning intended to provide the student with an opportunity for observation and participation in a wide range of gerontological activities in an approved institution or agency setting.

Credits: 3-12

Term(s) Typically Offered: Offered Every Term

Students with a semester level of Freshman 1, Freshman 2, Junior 1, Sophomore 1 or Sophomore 2 may **not** enroll.

**GERO 465 - Seminar in Gerontology**

An interdisciplinary investigation of selected facets of gerontology. Course content is drawn from the biological, behavioral, and social sciences, and it will include a consideration of current issues in such areas as mental health, housing, economics, transportation, preventive health program, long-term care, and leisure work activities.

Prerequisite: GERO 265<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**GERO 490 - Independent Study**

A rigorous investigation of a topic of relevance to gerontology not covered in detail in existing courses. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**GERO 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**GERO 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

## Health Care Administration & Management (HCAM)

**HCAM 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**HCAM 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HCAM 195 - Health Care Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format and on a timely topic.

Prerequisite: HCAM 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**HCAM 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisite: HCAM 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HCAM 200 - Introduction to Population Health**

Introduction to Population Health examines the social determinants of health, diverse population groups' interface with a continuum of healthcare services, and fundamental issues of health equity. This course will focus on how population health is a function of multiple interconnected healthcare system participants.

Credits: 3

**HCAM 230 - US Healthcare Systems**

This course offers an overview of the U.S. healthcare delivery system and challenges that confront the industry. It examines legal, technological, economic, political, ethical, and social forces that impact the healthcare industry. Students will learn about the delivery of healthcare services in various settings, as well as the role of government, professional agencies, and other industry related organizations. The allocation of scarce healthcare resources is examined through the lenses of social awareness, civic responsibility, and quasi-market forces. This course also equips students to become informed healthcare consumers and introduces them to healthcare employment opportunities.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms, Offered Summer Terms

Thematic Thread(s): Citizenship & Social Problems, Institutions & Human Innovations, Transfer Thread Completion Course

**HCAM 250 - Medical Terminology for Healthcare Administrators**

This course is designed to provide students with a basic understanding of medical language. Emphasis is placed on basic medical word construction and language derivation related to health care.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Thematic Thread(s): Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**HCAM 265 - Managed Care & Insurance**

This course examines Managed Care Organizations, insurance plans, Consumer Directed Health Care plans, and Health Care Exchanges. Students will explore the influence of managed health care and the various forms of health care insurance on the organization and delivery of health services in the United States are explored.

Prerequisite: HCAM 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer, Offered Summer Terms

**HCAM 275 - Health Care Legal & Ethical Foundations**

This course connects theoretical foundations of ethics with practical legal issues facing health care leaders. The course will define the role of the health care provider, payer, consumers, delivery systems, and regulatory bodies in addressing challenges presented by health care law and ethics.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

**HCAM 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HCAM 295 - Health Care Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format and on a timely topic.

Prerequisite: HCAM 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**HCAM 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisite: HCAM 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HCAM 300 - Healthcare Systems: Global Perspectives and Analysis**

This course examines health care systems from other countries in contrast to the United States system of health care. Students will be introduced to larger global perspectives about healthcare systems. Comparisons of healthcare systems' infrastructures, finance systems, level of government involvement, and key metrics of health outcomes will be discussed along with the interconnected socio-political issues across diverse populations.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HCAM 305 - Health Care Quality & Process Improvement**

This course examines a systems approach to continuous improvement processes in healthcare settings. Quality and process concepts and theories examined in this course are guided by data and processes at the unit and organization levels that reach beyond regulatory and accreditation compliance.

Prerequisites: HCAM 230<sup>D</sup> and HCAM 265<sup>\*D</sup> (may be taken concurrently).

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HCAM 332 - US Health Care Policy**

This course provides an overview of US health care policy in the postwar period. The course will examine the problems of health care costs, access, and quality in depth, consider alternative approaches to health care reform and use a comparative method to examine the health policies of other advanced industrialized countries. In addition, the course aims to introduce students to health policy analysis as an applied social science discipline.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HCAM 335 - Current Topics in Health Care**

This course examines current topics in healthcare from the interests of various constituencies and organizations. It is designed to introduce students to the identification and study of current economic, regulatory, operational issues, and emerging trends impacting the healthcare industry. Matters of healthcare policy, healthcare reform, current clinical and non-clinical healthcare developments, policy process, and advocacy will also be examined.

Credits: 3

Term(s) Typically Offered: Offered Summer & Winter Terms

Thematic Thread(s): Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HCAM 360 - Healthcare Organizational Dynamics**

This course introduces concepts associated with organizational dynamics in the healthcare industry. Students will examine content from individual, team, and organizational perspectives. Organizational dynamics are examined to provide a better understanding of how to deliver value within a competitive and changing healthcare industry.

Prerequisite: HCAM 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms, Offered Winter Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HCAM 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HCAM 395 - Health Care Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format and on a timely topic.

Prerequisite: HCAM 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**HCAM 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisite: HCAM 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HCAM 400 - Legal Environment of Healthcare**

Legal Environment of Healthcare acquaints future healthcare managers with legal issues relating to government, patients, healthcare employees, and contractors. This course surveys a wide variety of legal concepts, terms, and common-sense tips for entry-level healthcare organization employees.

Prerequisites: HCAM 230<sup>C</sup> and HCAM 275<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even, Offered Spring Terms, Offered Winter Terms Odd

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**HCAM 410 - Strategic Leadership in Health Care Organizations**

This course will examine leadership principles necessary to be effective in a continuously changing health care industry. Concepts covered include cultural competency, patient and family centered care, community outreach, coalition building, teamwork effectiveness, and leading within an environment of change in the US health care system.

Prerequisites: HCAM 230<sup>D</sup> and (HCAM 360<sup>D</sup> or MGMT 351<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**HCAM 415 - Marketing for Health Care Organizations**

This course covers the application of marketing concepts, tools and techniques to marketing problems, emphasizing strategic thinking, and analysis in a healthcare environment. Students will gain perspective on how a healthcare marketing function links to the overall business system.

Prerequisite: MRKT 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HCAM 425 - Long Term Care Management**

This course will examine long-term care organizations and care in the United States. Students examine external and internal long-term environments, the organization and delivery of services, administration, management, and leadership of long-term care organizations.

Prerequisites: HCAM 230<sup>D</sup> and (HCAM 360<sup>D</sup> or MGMT 351<sup>D</sup>) and HCAM 265<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**HCAM 430 - Finance for Healthcare Organizations**

This course is designed to build on accounting and financial management strategies used in profit and not-for-profit healthcare organizations. It will expose students to the practical application and theoretical constructs necessary to manage finances in a variety of healthcare organizations.

Prerequisites: HCAM 230<sup>D</sup> and ACCT 209<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HCAM 450 - Internship-Health Care Administration & Management**

This internship provides students with an opportunity to apply theory to practice and develop competencies through a work-related experience in a profit, or not-for-profit, healthcare related organization.

Prerequisites: HCAM 230<sup>D</sup> and HCAM 360<sup>D</sup> and HCAM 265<sup>D</sup> and HCAM 400<sup>D</sup> and (HCAM 405 (may be taken concurrently)<sup>D</sup> or HCAM 305<sup>\*D</sup>) (may be taken concurrently).

<sup>D</sup> Requires minimum grade of D.

Credits: 1-12

Term(s) Typically Offered: Offered Summer & Winter Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HCAM 470 - Healthcare Practice Management**

This course will prepare students with the fundamental knowledge needed to manage various types of healthcare practices. This includes topics such as differentiating between types of medical practices; accreditation, credentialing and licensing; regulatory compliance, compensation, productivity and provider contracting; billing & the lifecycle of a claim; patient experience & referral analysis; quality & utilization management; coordination of care; and innovation in care, payment and organizational models.

Prerequisite: HCAM 360<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**HCAM 480 - Healthcare Value-Based Reimbursement Systems**

This course examines payment reform in the healthcare industry, focusing on the shift to value-based reimbursement systems. Students will gain a basic understanding of data sources, the requirements to prepare data for analysis to develop practical applied insights, and the importance of integrating such into healthcare organizational workflows. Students will be able to apply their understanding of the challenges and requirements of performance metrics and systems information in a healthcare environment and learn methods used to improve value in healthcare services through leveraging data and information.

Prerequisites: HCAM 305<sup>D</sup> or HCAM 405<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

**HCAM 490 - Independent Study**

In-depth reading and/or research with the guidance of a faculty member in an area selected by the student. Prerequisites: 12 credits in major courses, application and permission of the instructor, departmental chairperson and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HCAM 495 - Health Care Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format and on a timely basis.

Prerequisite: HCAM 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**HCAM 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisite: HCAM 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HCAM 499 - Health Care Theory and Research Capstone Seminar**

This course examines health care theories that focus on the key concepts of individual and population health, access to health care, cost of health care, quality of health care, and health care organization structures and processes. Students will research areas of interest based on these theoretical concepts.

Prerequisites: HCAM 230<sup>D</sup> and HCAM 360<sup>D</sup> and HCAM 400<sup>\*D</sup> and (HCAM 405 (may be taken concurrently)<sup>D</sup> or HCAM 305<sup>\*D</sup>) (may be taken concurrently).

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may **not** enroll.

## Health Science-Public Health (HLTH)

**HLTH 100 - Introduction to Health Careers**

Provides students with an understanding of various career opportunities in health and safety occupations and the opportunity to determine whether their needs, interests, abilities, and values are suited to careers in this area.

Credits: 3



**HLTH 101 - Personal Health**

Addresses concerns pertaining to college living and life-long health. Emphasizes wellness with its emotional, physical, and social components.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course

**HLTH 102 - Health Appraisal and Promotion**

Discusses the role of wellness in health promotion. Identifies major health risks and examines primary prevention strategies utilizing select health appraisal instruments for the promotion of optimal individual and community health. Exposes students to agencies, which serve as resources for health information.

Credits: 3

**HLTH 103 - Health and Behavior Change**

Examines the major health problems and health risks to determine feasible secondary and tertiary intervention strategies to maintain, promote and manage the highest possible level of individual and community health. Explores behaviors and circumstances that are barriers to seeking and/or adhering to medical advice.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment is limited to students with a program in Public Health, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

**HLTH 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**HLTH 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HLTH 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**HLTH 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HLTH 203 - Public Health and Physical Activity**

This course will focus on introducing public health students to the benefits of physical activity (PA), how to safely engage in PA and how to apply PA to the public health model.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment is limited to students with a program in Public Health or Health Science - Public Health.

**HLTH 210 - Introduction to Public Health**

Provides a broad foundation of information related to the structure and functioning of the community health system including the identification and examination of programs, providers, and current problems associated with the delivery of health services.

Credits: 3

Term(s) Typically Offered: Offered Fall, Winter, & Spring

Enrollment is limited to students with a program in Public Health, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

**HLTH 211 - Women's Health Issues**

Examines the role of women as consumers and as both formal and informal providers of health services.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

**HLTH 262 - Health Foundations**

Identifies and examines the major health problems at the individual and community level. Emphasizes health information and resources that can be used to deliver developmentally appropriate primary, secondary and tertiary education and/or interventions among diverse populations.

Credits: 3

Enrollment is limited to students with a program in Exploratory Physical Educ, School Wellness Education, Health-Physical Educ Teaching, Public Health, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

**HLTH 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HLTH 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**HLTH 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HLTH 301 - Introduction to Health Education**

Examines the knowledge and skills necessary to function effectively as a community, school, or worksite health educator. Emphasizes the responsibilities and competencies of the Certified Health Education Specialist.

Prerequisites: HLTH 103<sup>D</sup> and HLTH 210<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Public Health, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

**HLTH 309 - Introduction to the Study of Disease**

Provides a broad foundation of information related to the etiology, pathophysiological mechanisms, signs and symptoms, outcomes and current therapies for selected communicable, genetic, and chronic diseases.

Prerequisite: BIOL 216<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Winter Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Public Health, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

**HLTH 310 - Environmental Health**

Explores the ecologic, economic, ethical, toxicologic and epidemiologic bases for environmental health both globally and within the community setting. Emphasizes the relationship between biological, physical and chemical agents and disease/injury causation and the role of government.

Prerequisites: CHEM 104<sup>D</sup> or CHEM 107<sup>D</sup> or BIOL 210<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring & Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Public Health, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

**HLTH 311 - International Health**

Examines significant health problems affecting populations in various areas of the world. Provides opportunities to understand approaches to health from different cultural perspectives and focuses on the integration of disease patterns in peoples within specific geographic areas. Emphasizes interdisciplinary perspectives on how cultural diversity relates to us and the world community.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HLTH 312 - Data Management for Health Science**

Explores methods of data collection, manipulation and reporting for health science. Includes computer applications.

Prerequisites: MATH 152<sup>D</sup> or STAT 152<sup>D</sup> or MATH 114<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Public Health, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

**HLTH 313 - Biostatistics**

Provides a broad foundation of knowledge related to data analysis in health science. Emphasizes the interpretation of health data and the computer skills for common statistical methods.

Prerequisites: HSAF 312<sup>D</sup> or HLTH 312<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Public Health, Exercise Science, Exercise Sci- Pre PT-SRU 3+3, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

**HLTH 314 - Nutrition and Health**

Examines basic scientific principles of nutrition, specifically all major nutrient classes in terms of functions, food sources, and adequate intakes along with sensitivity to diverse needs throughout the life cycle. Emphasizes interdisciplinary perspectives on how cultural diversity relates to food choices and how unique ethnic health challenges influence dietary needs.

Credits: 3

Term(s) Typically Offered: Offered Fall & Winter Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Public Health, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

**HLTH 316 - Human Sexuality**

Surveys a broad range of information about human sexuality from biological, psychological, sociological, religious, and medical perspectives.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HLTH 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HLTH 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HLTH 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HLTH 406 - Program Planning and Evaluation**

Provides basic proficiency in quantitative and qualitative approaches to health education and health promotion program measurement and evaluation. Current trends and issues in community, school and worksite health promotion are brought to bear on the problems of implementing and interpreting the results of formative and summative evaluation.

Prerequisite: HLTH 301<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Public Health, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

**HLTH 408 - Public Health Administration**

This course is designed to give an overview of the context, infrastructure and core functions of public health systems and related administration. It focuses on the administrative aspects for carrying out the public health functions, and the legal, ethical, economic, management, leadership, and regulatory dimensions of public health systems. This course also addresses performance measures, strategic planning, information systems, and current issues or trends in public health.

Prerequisite: HLTH 210<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Public Health or Health Science - Public Health.

**HLTH 410 - Epidemiology**

Introduces the study of population-based research and statistical methods of inquiry regarding distribution and determination of disease in human populations. Emphasizes appropriate study design and investigative techniques and interpretation of findings related to community health. Prerequisites: HLTH 313 Biostatistics or taking HLTH 313 Biostatistics concurrently.

Prerequisite: HLTH 313 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring & Summer Terms

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Public Health, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

**HLTH 424 - Nutrition and Exercise**

This course provides an understanding of the dietary standards that dictate nutritional requirements for apparently healthy adults. Emphasis is placed on the evaluation of an recommendations for macronutrients, micronutrients, and hydration status for health, physical activity, and human performance.

Prerequisites: (HLTH 314<sup>D</sup> or ERS 300<sup>D</sup>) and ERS 301<sup>D</sup> and ERS 302<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Exercise Science, Exercise Sci- Pre PT-SRU 3+3 or Athletic Training.

Enrollment limited to students in the BS 6149 or BS 6204 programs.

**HLTH 440 - Public Health Seminar**

This course is designed to provide a critical analysis of the major contemporary public health problems facing persons and communities. Content will also address professionalism and career advancement in the public health professions.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Public Health, Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

**HLTH 450 - Internship**

Provides opportunity to apply theory and develop competencies through a work-related experience in an appropriate cooperating enterprise. Summers only.

Credits: 1-12

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a major in Health Science - Public Health or Hlth Sci-P Hlth-Pre PT-SRU 3+3.

**HLTH 455 - Student Teaching - Health Science**

Under the guidance of a cooperating teacher and university supervisor, students engage in two, eight week assignments on a full-time basis in specified school districts and attend scheduled seminars. Supervisors assign additional requirements.

Credits: 3-12

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HLTH 490 - Independent Study**

Students study under the supervision of a professor on a specific and significant topic. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HLTH 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HLTH 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Health Service Administration (HSA)

**HSA 332 - Health Services Planning and Evaluation**

Provides knowledge about comprehensive health planning, comparing concepts, models, and approaches.

Prerequisites: (ECON 219<sup>D</sup> or BUSA 219<sup>D</sup> or MGMT 219<sup>D</sup>) and COMM 231<sup>D</sup> and HSA 231<sup>D</sup> and (PROF 251<sup>D</sup> or MGMT 251<sup>D</sup> or MGMT 351<sup>D</sup>) and MRKT 330<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HSA 436 - Technology in Health Care**

This course is designed to provide an understanding of common computer systems, applications, and the intelligent use of information in healthcare in areas such as: patient care, management, administration, strategic-decision support, and e-health. It presents information on hardware, software, networks, and data management to enable students to become conversant with modern technology and its use in healthcare organizations. Emphasis is placed on strategic planning, decision support, continuous quality improvement, and high-quality patient care.

Prerequisites: (CPSC 210<sup>D</sup> or MIS 210<sup>D</sup>) and HSA 231<sup>D</sup> and CPSC 323<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HSA 439 - The Accreditation and Survey Process**

Focuses on the role, responsibilities, standards, and requirements involved in accrediting and licensing surveys for health care organizations.

Prerequisites: HSA 231<sup>D</sup> and (MGMT 250<sup>D</sup> or MGMT 351<sup>D</sup> or MGMT 251<sup>D</sup>) and (MRKT 330<sup>D</sup> or MRKT 230<sup>D</sup>) and ACCT 340<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## History (HIST)

**HIST 051 - Discussion**

This is a laboratory experience associated with Ancient and Medieval World HIST 151.

Credits: 0

**HIST 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**HIST 151 - Ancient World to the Age of Global Encounters**

This course surveys civilizations across the globe from the earliest developments in Mesopotamia to the complex global interactions of the 17th Century. Students will explore the origins of human societies and the evolution of their development over centuries. Some of the areas covered will include classical world of Ancient Greece and Rome, the religious and cultural development of Asian during the Axial Age, the birth of Christianity and Islam, the age of Exploration, and the Columbian Exchange.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Institutions & Human Innovations, Transfer Thread Completion Course

**HIST 152 - Early Modern to Contemporary World**

This course surveys world events from the expansion of European and Asian empires in the 17th Century to the end of the 20th Century. Students will explore historical documents to engage with people and events and gain a better understanding of the interconnections between the development of various societies across the globe.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United Stated in Global Context

**HIST 180 - Spotlight on the Past**

Students examine a historical moment or theme using the sources and methodologies of humanities disciplines. They consider how people asked questions and sought answers to the challenges of the human condition then and now. Each section of this course focuses on a different topic. Refer to section descriptions when registering.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**HIST 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HIST 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**HIST 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HIST 201 - Colonial US to the Civil War Era**

This course is a survey of US History from the earliest records to the Civil War Era. Students will engage with historical texts to explore topics that have shaped the nation that the United States has become. These can include: Indigenous cultures that formed America's first permanent societies, the arrival of European colonists, the origins of slavery, the American Revolution, Westward expansion, sectional divisions over slavery, and the Civil War.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Institutions & Human Innovations, Transfer Thread Completion Course, United Stated in Global Context

**HIST 202 - US Civil War Era to Present**

This course surveys US History from the 1860s to the present day. Topics may include: sectional division over slavery, the Civil War, Reconstruction, industrialization, Progressivism, the two world wars, and the Cold War.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United Stated in Global Context

**HIST 205 - The Historian's Craft**

This course introduces students to the essential skills associated with historical research and writing, as well as a survey of various historical philosophies, historiography, and careers for history majors.

Prerequisites: HIST 151 (may be taken concurrently)<sup>D</sup> and HIST 152<sup>\*D</sup> and HIST 201<sup>\*D</sup> and HIST 202<sup>\*D</sup> (may be taken concurrently).

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms



**HIST 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HIST 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**HIST 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HIST 304 - American Military History**

A survey of the development of all branches of the American military spanning the colonial period to present day. The course includes a brief introduction to the development of the western way of war from pre-Hellenistic conflict through the middle ages in Europe. Technological innovation, evolution of tactical through strategic levels of warfare, and the symbiotic relationship between military development, national policy, and societal expectations will be examined.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 305 - Russia to 1855**

A social, political and cultural history from ancient times to the death of Nicholas I.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 306 - Russia Since 1855**

Continuity and change in Russia from the reign of Alexander II through the Soviet period.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 313 - U.S. Manhood and Masculinities**

An examination of expressions of manhood in American History from the colonial era to the present. Through the use of gender as a category of historical analysis, students will study notions of manhood in social relations, sexuality, the economy and politics.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 318 - Gender and Sexuality in European Society**

This course examines gender and sexuality in European society with emphasis on the relationship between ideas about gender and sexuality and their social and cultural manifestations.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 319 - History of Women to 1750**

An analysis of women from the earliest civilizations to 1750 through the examination of the lives of ordinary and outstanding women from different levels of the social order.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 320 - History of Women from 1750 to the Present**

This course will examine the role of women in the period 1750 to present from a cross-cultural perspective. Through the use of gender as a category of historical analysis and with particular reference to socio-economic differences, we will study the participation of women in the emergence of new national-states; the history of women's labor in the household and the work place, the contribution of women in intellectual life, and the participation of women in the social/political reform movements of the modern era.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 323 - African American History to 1876**

To investigate, discuss and debate the historical experience of African Americans from their origins in West Africa, through the Middle Passage and the Plantation, to the 15th Amendment and the Sell-Out of 1876.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 324 - African American History Since 1876**

The historical experiences of African Americans from the collapse of the Reconstruction and the emergence of Booker T. Washington, through the NAACP, UNIA, and the Harlem Renaissance, to the rise of the Nation of Islam, CORE, SCLC, and the election of 1976.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 326 - The Long Civil Rights Movement**

Examines Black social movements, organizations, and civil rights court decisions in the United States from 1900 to the present.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 331 - England to 1689**

Celts, Anglo-Saxons, Danes, and Normans in the formation of a nation, the medieval period, and the Tudor and Stuart centuries.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 332 - Britain Since 1689**

This course investigates key events and individuals in British history since the Glorious Revolution.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 333 - Medieval Church**

This course examines the medieval church and society with particular emphasis on the ways in which medieval men, women and institutions defined and applied the concepts of sanctity and heresy.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 335 - Outstanding Americans**

A biographical approach to the study of American history. A study is made of the lives of those Americans who have made a contribution to society outside of politics.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 336 - American Economic History**

American economic development with an emphasis on commerce, industry, labor, finance and governmental participation.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 337 - Native American History**

Histories and cultures of Indigenous peoples of North American from the pre-contact period to the present.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 343 - Public History**

This course is intended to introduce students to the practices and theory of public history. Students will gain an understanding of museums, historic preservation, archives, documentary film, and many other methods of preserving and presenting historical content outside the classroom.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 344 - The American City**

This course explores the history of American cities from the colonial period through the present day, with particular emphasis on the late 19th and 20th centuries. Examines the formation and evolution of the physical urban environment; the city as a site of race, class, and ethnic interactions; urban political, economic, and cultural evolution; transportation and suburbanization; and the consequences of the "urban crisis" of the post-World War II era.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Cultural Literacy & Community Building, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 346 - Rise of Imperial Britain**

This course is a study of key events, people and trends that shaped British history from the Act of Union that brought England, Scotland, Wales and Ireland together into a single nation, until the eve of WWI. This course will use literature, film, art and primary source documents, as well as textbooks to examine Britain's rise to be the largest and most powerful empire in the world.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 347 - Twentieth Century British Culture**

This course is a study of key events, people and trends that shaped British culture throughout the Twentieth Century. The course will focus on such moments as the two world wars, decolonization and the rise of a multi-racial populace. It will provide the historical narrative and then analyze the cultural impact through the use of film, television, art, theater, photography and music.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 350 - The American Civil War**

An examination of the causes, conduct, and consequences of the American Civil War with emphasis given to its political, constitutional, economic, military, and social ramifications.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 351 - Latin America to 1830**

Political, economic, and social development of the Spanish and Portuguese colonies in America, culminating in the winning of national independence.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 352 - Latin America Since 1830**

Developing countries of Latin America, their internal problems, international relations and historic evolution to the present.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 353 - History of the Americas**

A study of the American republics and their interactions from the colonial era to the present. Students will begin their study by examining the rise and decline of the Spanish, Portuguese, Dutch, French and British empires in the New World. Having considered many of the legacies bequeathed to the new American republics by their colonial heritage, students can then examine how those legacies have affected inter-American relations for the last two centuries.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 358 - American Popular Culture, 1865 to the Present**

An interdisciplinary course, involving American literature, philosophy, the fine and performing arts, sports and politics, which examines characteristics and patterns in American popular culture and institutions. Studies will focus on how the creative life of selected Americans and their institutions inform the nature of the evolving cultures in different eras in American history and how they continue to shape the nation and its diverse peoples, values and mores.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 362 - Africa North of the Zambezi**

Language groups, migrations of peoples, external influences, colonialism, and the emergence of independent states.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 363 - Southern Africa**

The Republic of South Africa and the High Commission Territories of Bechuanaland, Swaziland, and Basutoland, including colonialism, imperialism, war, and reconstruction in the 19th and 20th centuries.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 364 - History of Medicine**

This course will trace the history of medical philosophy and practices. It will examine the vast variety of efforts to amend human suffering and extend life through human intervention. The course is concerned with medicinal approaches throughout the span of human development and across the globe.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 370 - History and the Bible**

The history of the eastern Mediterranean area from 1800 B.C.-100 A.D. with a study of the Old and New Testaments in order to evaluate their historical validity.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 371 - History of Jews**

A course surveying Jewish life and thought from early Roman times to the present. Four thousand years of Jewish participation in most world civilizations are examined, and religious, philosophical, and literary contributions are analyzed.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 376 - Modern Japan**

This course investigates the history of the Japanese people from the beginning of the nineteenth century to the present.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 380 - Egyptology**

A study of the history and culture of ancient Egypt from the old kingdom through the new kingdom. The methods and disciplines utilized in the study of an ancient culture will be analyzed and evaluated.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 381 - East Asian Military Traditions**

This course examines the factors that have distinguished East Asian military practices from the fifth century BCE to modern times.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 382 - Modern Asian Pacific Rim**

This course examines the political, social, economic, technological and cultural factors that have affected the Asian Pacific Rim's evolution into the most economically dynamic region of the world today.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 386 - Modern China**

In this course we investigate the history of modern China, the major factors that influenced its course, the values that operate in Chinese society today as well as its fast ascent to major international importance.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 404 - Violence in Post-45 Europe**

This course focuses on three case studies of violence in Europe in the post-WWII era: 1. Displaced Persons and the refugee crisis as a result of the collapse of governments at the end of the war; 2. The sectarian violence in Northern Ireland between 1968 and 2000; and 3. The wars in the Balkans in the 1990s.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 406 - Mass Killing and Genocide in the Modern World**

In this course, we will explore through readings, films, discussion and internet the troubling and complex topics of mass killing (massacre) and genocide in the modern world, both vexing issues that continue to plague us into the twenty-first century and that no doubt we will face into the foreseeable future. We will examine definitions of terms and the long-term historical context(s) for mass killing/genocide, then we will consider specific cases of mass killing and genocide worldwide.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Cultural Literacy & Community Building, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**HIST 411 - Digital History**

This course will explore the ways in which digital technologies are changing how historians think about, research and present the past; topics may include digital publishing, visualizations, geospatial mapping, text mining and digitization of historical documents and artifacts.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**HIST 422 - Ancient Greece**

This course examines the history of ancient Greece, from the rise of its city-states to the Hellenistic world created by Alexander the Great's conquests. In addition to surveying major events, significant persons, and intellectual achievements, additional emphasis will be given to examining contributions to modern concepts of participatory government and intellectual constructs.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 423 - Ancient Rome**

This course examines the history of Ancient Rome, from its origins ca. 800 BCE to its "fall" traditionally dated ca. 476 CE. In addition to surveying major events and significant persons during its Regnal, Republican and Imperial Periods, emphasis will be given to examining Roman culture and political development as antecedents to modern institutions.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 424 - The Middle Ages**

This course investigates the major political, social, and intellectual developments of Western Europe during the Middle Ages, 500 to 1500.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 426 - French Revolution and Napoleon**

French political, social, and economic affairs in the 18th century, the French Enlightenment, the Revolution, and the Napoleonic period.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 427 - Nineteenth Century Europe**

From the Congress of Vienna to the outbreak of World War I, examining nationalism, liberalism, the response to industrialism, imperialism, the rise of the alliance system, and the breakdown of nineteenth century order.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Cultural Literacy & Community Building, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 435 - Pennsylvania**

The founding and growth of Pennsylvania to the present.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 437 - The American West**

This course examines the history of diverse groups that have resided in the American West since the sixteenth century—Native Americans, Spanish, Mexicans, and citizens of the United States. Topics include the role of the United States government in the conquest, economic development, and administration of the West; the legacy of that conquest for native and immigrant peoples; the formation of distinctive Western communities; contests for access to natural resources and wealth; and the idea of the mythic frontier in American culture.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 445 - Americans and the Environment**

This course surveys the environmental history of North America from pre-columbian societies until the present, exploring how the environment has influenced America's social, political, economic and cultural development, as well as how human activity and ideas have shaped nature.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 450 - History Internship**

Supervised placement and research in selected public and private agencies at appropriate institutions.

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**HIST 453 - American Constitutional History and Law**

Federal constitution by the Supreme Court, including the growth of constitutional law and political, social, economic, and technological changes.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 454 - Research and Writing Seminar**

This class is the capstone course for all history majors. In it, students will have the opportunity to synthesize their learning in the history program. They will apply content knowledge and use the research and writing skills they have learned. Students will produce a major research paper based on both primary and secondary sources.

Prerequisite: HIST 205<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students in the BA 5 44 program.

**HIST 462 - The Contemporary Middle East**

The economic, social, cultural, and political aspects of the Middle East in the perspective of the past.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 463 - Israel-History, State and Society**

In this course, we will examine the following topics: the development of Zionism and the circumstances in the Jewish Diaspora that led to the call for a "Jewish" state; the British Mandate for Palestine, 1920-1948; the establishment of Israel; Israeli state and society, 1948 to present; and Israel within the broader context of the modern Middle East.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 464 - The Scientific Revolution of the 17th and 18th Centuries**

The Scientific Revolutions of the 17th and 18th centuries is a survey of the changes and developments in Western science from antiquity to the brink of the Industrial Revolution. The course investigates the origins, transmission and development of scientific ideas and the appearance and impact of new intellectual communities in Western Europe.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 490 - Independent Study**

For history majors or advanced students with a background in history. Prerequisites: QPA of 2.750 in history and permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HIST 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Homeland Security (HSS)

**HSS 120 - Introduction to Homeland Security**

This course is a general introduction to the foundations of homeland security, counter-terrorism, infrastructure protection, intelligence operations and other mechanics of the homeland defense field. This course also includes an overview of the legal, sociopolitical and criminal justice aspects of homeland security.

Credits: 3

Term(s) Typically Offered: Offered Fall & Summer Terms

**HSS 130 - Principles of Emergency Management**

This course will introduce the foundations of emergency management and discuss the emergency management cycle. The concept of the whole community approach will be emphasized along with the tools and resources used in emergency management situations. An emergency exercise will be assigned and special topics unique to emergencies will be explored.

Credits: 3

**HSS 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**HSS 170 - Lenses of Catastrophe**

Lenses of Catastrophe asks students to examine the interdisciplinary approach of disasters. Disasters, whether stemming from natural or manmade hazards, can impact the entire spectrum of disciplines and industries. This course looks at disasters from the perspective of different fields and how they have been impacted by past events.

Credits: 3

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**HSS 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HSS 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. The course outline will be determined by the instructor based on key developments, trends or specialized content within homeland security. Permission of instructor.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**HSS 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HSS 210 - Fundamentals of Terrorism**

This course will explore the complex issues surrounding terrorism. In terms of terrorism, the topics addressed may include: complexities of defining it, types of terrorists, causes of terrorism, methods used to achieve their goals, environments, funding and support, structure and counter-terrorist measures, and the issues the criminal justice system faces when trying to prevent, detect, and investigate it.

Prerequisites: HSS 120<sup>C</sup> or CSS 120<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with department of Homeland/Corp Sec & Leadership.

**HSS 230 - Risk Analysis and Strategic Planning**

This course provides an overview of principles of risk analysis and management, including vulnerability and threat identification, assessing risk threats, security survey methodology, emergency management and response strategies.

Prerequisite: HSS 120<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**HSS 250 - Managing Natural, Man-Made and Technological Disasters**

This course will discuss the history of natural, technological and manmade (intentional) disasters. (e.g., 1918 Pandemic, Great Flood of 1923, 1994 Northridge Earthquake, Coronavirus 19, September 11th). Students will analyze the complex nature of disasters, identifying overriding themes while examining lessons learned and best practices to handle specific types of disasters.

Credits: 3

**HSS 260 - Emergency Management Planning**

This course will provide an in-depth analysis of planning methodologies and constructs as well as pitfalls and limiting factors in the development and execution of emergency management plans at the strategic, operational and tactical levels. The origins of emergency management planning, applicable policies and legislation will be reviewed. The course will also examine historical incident review and analysis, contemporary and emerging planning doctrine, and advanced planning concepts.

Prerequisite: HSS 130<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Enrollment limited to students with department of Homeland/Corp Sec & Leadership.

**HSS 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HSS 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. The course outline will be determined by the instructor based on key developments, trends or specialized content within homeland security. Permission of instructor.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**HSS 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HSS 300 - Terrorist Organizations and Lone Wolves**

This course will allow students to study the ideological evolution, the behavioral indicators, recruitment styles, organizational styles, financing methods, and tactics for specific domestic and international terrorist organizations. Issues such as the radicalization and behavioral indicators of both terrorist organization and lone wolves will be discussed as well.

Prerequisite: HSS 210<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Homeland/Corp Sec & Leadership.

**HSS 310 - Weapons of Mass Destruction**

This course will examine the threat and use of nuclear, biological, chemical, and radiological weapons and their implications to the Homeland. The course will evaluate means of proliferation and countermeasures overseas and within the Homeland.

Prerequisite: HSS 210<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Homeland/Corp Sec & Leadership.

**HSS 320 - Protecting Infrastructure and Key Assets**

This course focuses on the protection of critical infrastructure, including information and telecommunication systems, water supply, energy, first responders, transportation, health/medical and other key assets.

Prerequisite: HSS 230<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HSS 330 - Intelligence Operations**

This course encompasses the development and use of national security and policing intelligence, and includes theoretical and practical models of intelligence in governmental and private security environments.

Prerequisite: HSS 320<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HSS 340 - Intelligence for Homeland Security**

This course will examine intelligence operations for the Homeland Security Enterprise at the state and local level, within the Department of Homeland Security, and within the private sector. The course will utilize intelligence tradecraft to assess current threats, trends, hazards, and vulnerabilities in the Homeland. The course will also prepare students to write intelligence briefs.

Prerequisite: HSS 330<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Homeland Security.

**HSS 350 - Securing Virtual Infrastructure**

This course will examine the implications of the growing cybersecurity environment. The course will discuss targeted systems, threat adversaries, attack methods, and recovery and mitigation processes.

Prerequisite: HSS 230<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Homeland Security.

**HSS 360 - Social Dimensions of Disaster**

This class will analyze how individuals, groups, families, organizations, communities and countries, handle disasters before, during, and after they occur. The vulnerability of various social groups will be explored as well as reactions to disasters the stressors associated with disasters. Methods to reduce vulnerabilities and build local capacity will be covered.

Prerequisites: HSS 250<sup>C</sup> or HSS 260<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in CERT - Emergency Management, Emergency Management, Corporate Security, Homeland Security, Fraud or Organizational Security.

**HSS 370 - Research in Disasters and Emergency Management**

This course will describe in detail how research is conducted in disasters and emergency management how to read and understand scholarly work; and apply related studies from the field of disaster research. Students will be taught how to evaluate open-source data for construction of research projects. The basic foundations of how to conduct qualitative research studies geared towards disaster research will be provided.

Prerequisite: HSS 250<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in CERT - Emergency Management, Emergency Management, Corporate Security, Homeland Security, Fraud or Organizational Security.

**HSS 380 - Crisis & Emergency Risk Communication**

Disasters mandate effective communication. This course will analyze communication theory to examine common challenges and best practices encountered in emergency, crisis and risk communication situations by public information officers, public authorities, first responders, and health professionals. It will explore the opportunity to develop strategies and communication solutions in interpersonal, mediated, social media, and public contexts.

Prerequisite: HSS 250<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in CERT - Emergency Management, Emergency Management, Corporate Security, Homeland Security, Fraud or Organizational Security.

**HSS 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HSS 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. The course outline will be determined by the instructor based on key developments, trends or specialized content within homeland security. Permission of instructor.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HSS 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HSS 441 - Terrorism, Law and National Security**

This course will discuss terrorism-its structure, causes, and illegal financing and the evolution of domestic and international laws evolving to deal with terrorism and national security.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HSS 450 - Internship HS**

Supervised placement and research in selected public and private agencies. Permission of instructor.

Credits: 3-9

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HSS 460 - Capstone in Homeland Security**

The Capstone class applies student professional proficiency, communication skills, ethical understanding, cultural awareness and critical thinking towards the completion of a capstone project that demonstrates competency in multiple aspects of homeland security and defense.

Prerequisite: HSS 340<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Homeland Security.

**HSS 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. students work on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HSS 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic. The course outline will be determined by the instructor based on key developments, trends or specialized content within homeland security. Permission of instructor.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HSS 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Honors (HONR)

**HONR 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HONR 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**HONR 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HONR 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HONR 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**HONR 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HONR 300 - Seminar in Global Learning**

Honors Global Learning Seminar is an interdisciplinary course that explores some of the world's most pressing, interesting, and enduring global issues. This course makes use of experiential learning to allow for personal and professional development of skills and knowledge to become informed, self-aware, and responsible global citizens with increased attentiveness to diversity and the interdependence of the world's people and/or environmental systems.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2 or Sophomore 2.

Enrollment limited to students with the HONORS PRGM - STUDENT attribute.

**HONR 385 - The Great Books**

Seminars on selected topics from the classic works of human thought.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**HONR 386 - The Great Books**

Seminars on selected topics from the classic works of human thought.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**HONR 387 - The Great Books**

Seminars on selected topics from the classic works of human thought.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**HONR 388 - The Great Books**

Seminars on selected topics from the classic works of human thought.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**HONR 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HONR 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**HONR 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed



**HONR 492 - Innovation for Positive Change**

This course deals with the background knowledge, skills, and dispositions needed to innovate. This includes the ability to develop new ideas, recognize opportunities, analyze risks, create teams of motivated helpers, foster positive communication within the team, lead the team effectively to bring about change, assess progress from an idea to a change, and to pivot along the way. This course serves as the capstone course for the Innovation and Entrepreneurship Rock Studies Thread.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Transfer Thread Completion Course

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

**HONR 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**HONR 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## Hospitality, Event Management & Tourism (HEMT)

**HEMT 112 - Introduction to HEMT**

The purpose of this course is to assist individuals with matching their aspirations with the opportunities within the hospitality and tourism profession. Primary areas related to tourism, recreation and event and hospitality management will be discussed providing a roadmap for students to chart their careers in the profession.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**HEMT 114 - Sustainability in Food and Hospitality**

An exploration of the economic, environmental and social sustainability challenges and advancements in the hospitality and food industry. A comprehensive investigation of today's U.S. food system with particular focus on the food system's interrelationships with public health, the environment, equity, and society.

Credits: 3

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

**HEMT 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**HEMT 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HEMT 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**HEMT 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HEMT 210 - Contemporary Travel and Tourism**

This course provides students with a diverse and contemporary knowledge of the tourism industry, ecotourism, tourist behavior, tourism management, and issues in medical tourism, crisis management, sustainable travel and environmental friendly practice within the overall global tourism sector. Students will have opportunities to investigate real life cases and current events, and to explore the various elements of the travel and tourism industry and how they interrelate. This will enable students to develop an overall knowledge in the field and appreciation of the global travel and tourism experience.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

**HEMT 215 - Public Relations for Hospitality, Event Management & Tourism**

The theory, principles and practices of public relations of value to hospitality and tourism personnel including oral, written and graphic presentations useful in public relations and interpretive efforts.

Prerequisite: HEMT 112<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**HEMT 222 - Programming and Leadership for HEMT**

This course is designed to provide a sound basis of learning and practical methods in the realm of recreation programming and leadership. It includes practical approaches to program design, sequencing program experiences, processing experiences, assessment and evaluation and examines the needs of leaders as well as participants in terms of communication skills and preferred learning styles. Participant behaviors and the important traits of a positive leader will also be examined.

Prerequisite: HEMT 112<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**HEMT 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HEMT 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**HEMT 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HEMT 311 - Principles of Commercial Recreation/Tourism**

A study of the various forms of commercial recreation, business and facilities providing recreational opportunities.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HEMT 312 - Commercial Recreational Feasibility Studies**

This course is a study of financial, marketing, and operations management concepts that go into a feasibility study of a commercial recreation business.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HEMT 314 - Sustainable Planning for Tourism**

This course is designed to develop an understanding of how sustainable planning can reduce the negative impacts and maximize the benefits of the tourism industry. Students will research and evaluate the social, environmental and economic impacts of a variety of tourist destinations. Analyses of the sites will be followed by formulating proposals to address key issues.

Prerequisite: HEMT 210<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HEMT 316 - Management of Hospitality & Tourism Facilities**

A study of the design, operation and maintenance of selected hospitality, event management and tourism facilities.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HEMT 318 - Administration for Hospitality, Event Management & Tourism**

The organization and administration of hospitality, event management and tourism services, including organizational management, personnel practices and labor relations, financial and business procedures and legal aspects.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HEMT 320 - Hospitality and Tourism Marketing**

Course will examine service marketing concepts and practices as they relate to all areas of hospitality, tourism, and event management, and apply those principles to formulating marketing strategy.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students in a Bachelor of Science degree.

**HEMT 322 - Food and Beverage Operations**

Food and Beverage Operations is a survey of the food service industry to include: History and global economic impact, Menu engineering, Food sourcing with sustainable emphasis, Food Safety, Food Handling, Beverage Management, and exploration of commercial applications.

Prerequisite: HEMT 112<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

**HEMT 324 - Legal Issues in Hospitality and Tourism Management**

Course will examine legal issues affecting the contemporary Hospitality Industry, with an emphasis on a preventative approach to management. Extensive use of case studies will provide students with an awareness and understanding of the legal considerations necessary for sound policy and decision making.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2 or Sophomore 2.

**HEMT 326 - Introduction to Meetings and Event Management**

An introductory course for Event Management focusing on meetings, conferences, convention and trade shows with an emphasis on industry standards, language, and professional associations.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HEMT 351 - Practicum in HEMT**

Observation and participation in hospitality, event management and tourism activities. Cross listed as HEMT352.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HEMT 352 - Practicum in HEMT**

Observation and participation in hospitality, event management and tourism activities. Cross listed as HEMT351.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HEMT 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HEMT 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HEMT 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HEMT 415 - Challenges and Trends in Hospitality, Event Management & Tourism**

An integrative course for detailed study of current issues in hospitality, event management and tourism with emphasis on unique and imaginative solutions to the challenges facing the hospitality and tourism profession. Must be a senior to enroll.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**HEMT 416 - Resort Recreation Programming**

This course examines the planning, organization, pricing, and evaluation of recreation programs, activities, and special events at various four season resorts, municipal recreation departments and residential camps and camping facilities. This course will also analyze the planning, developing, marketing, administration, and implementation of group recreation and special events.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HEMT 417 - Hotel/Lodging & Hospitality Management**

This course is a study of the management and operation of a variety of departments/divisions of a hotel/resort.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HEMT 420 - Event Production and Coordination**

This course will explore the many aspects of event management, as well as identify and develop the skills necessary to design and develop a special event. Emphasis on the understanding of the genre, developmental steps in processing, and practical applications of execution in special event management. A HIP course, If feasible students will coordinate a live community event.

Prerequisite: HEMT 326<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HEMT 450 - Internship in HEMT**

A supervised off-campus work experience in an appropriate aspect of hospitality, event management, resort or municipal recreation or tourism work. Open only to HEMT majors with advanced standing.

Credits: 1-12

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Sport Mgt, Hospitality & Tour.

**HEMT 490 - Independent Study**

A special study opportunity for students to investigate in-depth, approved topics in hospitality, event management and tourism. Topic and credit established by student and supervising instructor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HEMT 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**HEMT 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Industrial & Systems Engineering (ISE)

**ISE 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**ISE 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ISE 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ISE 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ISE 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ISE 311 - Introduction to Operations Research**

Topics include deterministic methods in operations research. Linear programming, duality, integer programming, dynamic programming, nonlinear programming, inventory theory, transportation and assignment and network theory.

Prerequisites: MATH 231<sup>C</sup> or MATH 240<sup>C</sup> or (MATH 122<sup>C</sup> and MATH 230<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 330 - Six Sigma Methodology**

Statistical methods of Six Sigma used for efficient new product development as well as methods for process improvement. The math and methodology of six Sigma including DMAIC and DMADV processes. Topics will include measurement and analysis mathematical techniques. Design of experiment will be introduced. Case studies will be used to illustrate advanced concepts of Six Sigma.

Prerequisite: STAT 350<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 362 - Lean Systems**

The design and delivery of services. Topics include how to design and improve service offerings for sustained excellence, how to identify and overcome challenges in service delivery. Both traditional services as well as e-commerce service will be studied for both the private and public sector.

Prerequisite: ISE 330 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 370 - Design of Industrial Systems and Processes**

This course covers advanced topics in Applied Engineering Statistics. It includes the introduction to linear regression analysis, simple linear models, multiple linear models, residual analysis, indicator variables, variable selection process, ANOVA, introduction to design of Industrial systems and processes, basic designs, factorial designs, fractional factorial designs, blocking, Taguchi designs, and response surface methodology. Extensive use of statistical software will be introduced throughout the course.

Prerequisite: STAT 350<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 372 - Manufacturing Systems Design and Analysis**

Contemporary techniques used to design and analyze manufacturing systems for economic manufacture of products. Design of manufacturing systems (human and automated) to satisfy differing types of product demand will be explored.

Prerequisite: ENGR 340<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 373 - Quality Engineering**

A comprehensive coverage of modern quality control techniques including the design of statistical process control systems, acceptance sampling and process improvement.

Prerequisites: MATH 230<sup>D</sup> and (STAT 252<sup>D</sup> or STAT 350<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 382 - Sustainable Processes**

Exploration of the scientific and legal progress in sustainability. Students will learn both the theory of sustainability as well as how sustainable processes can be implemented throughout an organization.

Prerequisites: PHYS 217<sup>D</sup> and MATH 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 402 - Work Design**

Introductory tools required for analyzing and designing both the job and the worksite in a cost-effective manner, as well as measuring the resulting output. These tools include human information processing, basic auditory and visual displays, anthropometry and musculoskeletal principles, cumulative trauma disorders, work measurement and stopwatch time study. Students taking this course should be familiar with the basic concepts of cost.

Prerequisite: ISE 372 (may be taken concurrently)<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 410 - Engineering Project Management**

This course is an introduction to the concepts and practices of project management. It provides students with a basic exposure to the tasks and challenges facing today's engineering projects and in particular, those of the project manager. This course also provides students with the quantitative tools for the successful management of engineering projects. The problems of selecting projects, initiating projects, and operating and controlling projects will be discussed in this course.

Prerequisite: ENGR 340<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 420 - Simulation of Industrial Systems**

In this course, the student will develop an understanding and need for discrete event simulation in practice. The course will focus on basic and advanced concepts in simulation modeling including analyzing simulation results, and successfully developing simulation models useful in production/manufacturing, supply chains, transportation, and other areas related to industrial and Manufacturing Engineering. Simulation package such as ARENA will be integrated and used throughout.

Prerequisites: (MATH 311<sup>D</sup> or ISE 311<sup>D</sup>) and STAT 350<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**ISE 421 - Supply Chain & Logistics Engineering**

Overview of key logistics and supply chain management processes, concepts and methodologies. Emphasis is given to the Lean development of supply chain management, the analysis of logistics cost and service trade-offs among inventory transportation and warehousing activities, the strategic role of information technology in supply chains, the use of third-party logistics providers, and the methods of measuring the value of logistics performance. Instruction may include problem-based learning pedagogy.

Prerequisites: ISE 311 (may be taken concurrently)<sup>D</sup> and ISE 373<sup>\*D</sup> (may be taken concurrently).

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 430 - Production Planning & Control**

This course equips students with knowledge of fundamental issues in production and inventory planning and control while developing the students' modeling and analytical skills. This course emphasizes the application of industrial engineering theory and practice to the area of operations management and production planning/control. This course will cover analysis and understanding of forecasting, aggregate planning, operations strategy, capacity planning, supply-chain management, just-in-time systems, lean manufacturing, agile manufacturing, materials replacement planning, inventory management, and scheduling and sequencing.

Prerequisites: ENGR 340<sup>D</sup> and ISE 372<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 432 - Productivity Analysis**

Techniques for measuring and assessing productivity for output, labor, capital and input. Aggregation of productivity growth will also be discussed.

Prerequisite: MATH 231<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 440 - Health Care Systems Engineering**

The course examines the technical structure of the healthcare delivery system and the role that industrial engineering (IE) plays in its design and improvement. Included will be how healthcare systems work in hospitals, medical offices, clinics and other healthcare organizations. Traditional IE methods for improving quality, patient safety, and employee productivity and satisfaction will be present within a systematic application of value chain engineering designed to produce lean processes.

Prerequisites: ISE 311<sup>D</sup> and ISE 373<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 442 - Human Factors Engineering**

An analytic study of human factors that need to be taken into account in the design and engineering of complex workplace systems.

Body mechanics will be used to understand the needs of humans in the workplace under a variety of different constraints: physical demands, environmental conditions, human capability. system design considerations aimed at reducing safety hazards will be studied.

Prerequisite: ISE 402<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 460 - Engineering Risk Analysis**

This course is an introduction to risk, risk assessment, and risk management in engineering systems. It focuses on building mathematical models to assess and quantify risk principally by following the methodologies of probabilistic risk analysis. In particular, the course covers concepts of risk analysis, risks in engineered systems; methods of risk analysis, fault trees and event trees; quantification of probabilities, use of data, models, and expert judgments; risks and decisions, interlinking risk analysis with risk management; applications to cybersecurity.

Prerequisite: STAT 350<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 480 - Industrial and Systems Engineering Undergraduate Research**

Research and design problems of limited scope approved on an individual basis intended to promote independent study; results of study presented in writing.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

**ISE 487 - Industrial and Systems Engineering Senior Project I**

This course provides a proposal preparation for ISE 488 which includes defining a comprehensive problem in design involving systems in manufacturing, service, and other systems to improve efficiency and quality, and optimize the resources utilization.

Prerequisites: ISE 370<sup>D</sup> and ISE 420<sup>D</sup> and ISE 421<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 488 - Senior Project II**

Senior project in industrial and systems engineering. Requires students to complete a multi-dimensional project in their area of interest: industry, health-care, etc. The project must be approved by ISE faculty no later than the end of the fourth week of the start of the course. Students will be invited to propose their own projects or create one in collaboration with ISE faculty.

Prerequisite: ISE 487<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

**ISE 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ISE 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Interdisciplinary Programs (INDP)

**INDP 102 - Introduction to Interdisciplinary Studies**

Developing a critical lens to engage in cultural studies through interdisciplinary perspectives with a specific focus on cultural diversity.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**INDP 103 - Contemporary Social Problems**

An analysis of major social problems confronting modern society.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course

**INDP 106 - Race and Ethnic Diversity in the USA**

An introduction to racial and ethnic diversity in the U.S.A., with focus on trends in immigration, demographics, socio-cultural dynamics and issues, past and present.

Credits: 3

Term(s) Typically Offered: Offered Spring & Summer Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Transfer Thread Completion Course

**INDP 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**INDP 170 - Making Sense of Our Social World**

The course is an introduction to the techniques and strategies used by interdisciplinary social scientists to develop an understanding of the root causes, social context, and personal consequences that define the key issues of our contemporary social and cultural worlds.

Credits: 3

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**INDP 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**INDP 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**INDP 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**INDP 201 - Principles of Sociology**

Basic concepts of social behavior, group structure and group processes.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

**INDP 202 - Introduction to Anthropology**

Human beings as cultural and biological entities. Emphasis is on primitive and peasant societies.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

**INDP 211 - Biological Anthropology**

This course provides an understanding of the place of the human species within the biological system. It stresses the concepts and processes of evolution and emphasizes the study of human and non-human primates as seen in the fossil record as well as through study of genetics and behavior.

Credits: 3

Thematic Thread(s): Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**INDP 212 - Archaeology/World Prehistory**

A discussion of culture history around the world based on archaeological evidence. It begins with early signs of culture called the Paleolithic or Old Stone Age of Africa, Asia, Europe and America (where it is named Paleo Indian), and concludes with the rise of complex, stratified cultures based on agriculture in the Middle East, America, and East Asia.

Credits: 3

Thematic Thread(s): Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

**INDP 226 - Population and Society**

Sociological/anthropological analysis of selected population trends, problems and controversies in the contemporary world-both literate and non-literate.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Thematic Thread(s): Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

**INDP 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**INDP 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**INDP 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**INDP 304 - Urban Sociology**

Sociological aspects of urban life. Includes metropolitan areas and small cities.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 309 - Health and Society**

An analysis of health services, public policy and institutional relations.

Note: This course is taught from either a sociological or anthropological viewpoint. The student should check with the instructor to determine the approach being taken in the current offering.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 310 - Cultural Area Studies**

Anthropology course dealing with sociocultural phenomena of specific cultural areas. Topics to be announced. Course may be repeated one time in a different area.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 312 - Archaeology Techniques and Laboratory**

A course designed to introduce students to basic techniques in the field and to provide laboratory experience in working with field materials.

Prerequisite: INDP 202<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 317 - Statistics for the Social Sciences**

An enrichment course that introduces statistical concepts and techniques of data analysis with computer application to analyze contemporary social issues.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 318 - Research Methods in Interdisciplinary Studies**

Major methods and procedures used in interdisciplinary studies, including anthropology, cultural area studies, gender and diversity studies, leadership studies, nonprofit management and sociology.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 319 - Anthropology Methods**

Data gathering techniques and evaluation of anthropological phenomena from tribal, peasant and industrial societies.

Prerequisites: (SWCJ 202<sup>D</sup> or INDP 202<sup>D</sup> or PROF 202<sup>D</sup>) and (SWCJ 317<sup>D</sup> or INDP 317<sup>D</sup> or SOWK 317<sup>D</sup> or CRIM 317<sup>D</sup> or PROF 317<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 321 - Minority Groups**

An examination of the minority group concept with special emphasis on women, the poor, behavioral and physical minorities. Note: This course is taught from either a sociological or anthropological viewpoint. The student should check with the instructor to determine the approach being taken in the current offering.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Cultural Literacy & Community Building, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 322 - Archaeology of the Americas**

This course introduces the student to the unique intellectual and cultural achievements of the Native Civilizations of Central and South America prior to the arrival of the Spanish. Two thirds of the course concentrates on Mesoamerica, especially the Aztecs and the Maya. One third on South America, with an emphasis on the civilizations of Peru. The variety of cultural developments, including their great time depth, social, political, economic, and artistic achievements as revealed through archaeological exploration, are explored.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 323 - Deviant Behavior**

The subject and nature of deviance with particular emphasis on its relativity and its relationship to social control and social change.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 324 - The Family**

Comparative perspectives of the family as a universal social institution. Note: This course is taught from either a sociological or anthropological viewpoint. The student should check with the instructor to determine the approach being taken in the current offering.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 326 - Society, Culture and Self**

An examination of the relationship between personal characteristics and social environment.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 327 - Religion and Society**

Explores the relationship between religion and society and some of the key issues confronting religion today.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 330 - Collective Behavior**

An analysis of social movements, publics, crowds, mobs and similar social phenomena.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Thematic Thread(s): Cultural Literacy & Community Building, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 339 - Gender Roles and Society**

An examination of gender roles, what they are, how they develop and how they are maintained. An examination of the effects of gender roles on education, occupation, the polity and other institutions as well as the effects of role restrictions of personal relationships. Note: This course is taught from either a sociological or anthropological viewpoint. The student should check with the instructor to determine the approach being taken in the current offering.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Thematic Thread(s): Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 340 - Social Inequality**

Examination of the theoretical and practical implications of economic disparity across diverse populations: class, race, ethnicity and gender.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even, Offered Summer Terms

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 342 - Sociology of Aging**

Social changes, which accompany aging. Emphasis placed upon how social processes influence patterns of aging and social problems of older people.

Credits: 3

Term(s) Typically Offered: Offered Winter Terms

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 348 - Sociology of Organizations**

Approaches to the study of the structure and functions of large-scale social organizations.

Prerequisites: INDP 201<sup>D</sup> or INDP 202<sup>D</sup> or SWCJ 201<sup>D</sup> or SWCJ 202<sup>D</sup> or PROF 201<sup>D</sup> or PROF 202<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 360 - Issues in Asia; Women in Asian Societies**

Students will have an opportunity to gain an in depth understanding of the issues surrounding the roles and status of women in a rapidly changing Asia; from both a historic and a current context. These issues, which are political, religious, economic, health, social justice and legal, among others are vital for women in Asia, their societies as well as this ever globalizing world.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 401 - Applied Anthropology**

Using anthropological concepts and methods, this course explores the role of archaeologists, and physical and cultural anthropologists in understanding and facilitating change in human biological and cultural issues.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 412 - Basic Sociological Theory**

Historical and modern development of basic concepts of sociology and cultural anthropology.

Prerequisites: (INDP 201<sup>D</sup> or INDP 202<sup>D</sup> or SWCJ 201<sup>D</sup> or SWCJ 202<sup>D</sup> or PROF 201<sup>D</sup> or PROF 202<sup>D</sup>) and (SWCJ 318<sup>D</sup> or SWCJ 320<sup>D</sup> or INDP 318<sup>D</sup> or INDP 319<sup>D</sup> or SOWK 318<sup>D</sup> or CRIM 318<sup>D</sup> or PROF 201<sup>D</sup> or PROF 202<sup>D</sup> or PROF 318<sup>D</sup> or PROF 319<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 450 - Internship**

Supervised placement in selected professional agencies.

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**INDP 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**INDP 499 - Capstone: Applied Interdisciplinary Studies**

This seminar is designed to assist students in developing awareness and skills for entry into the career or graduate studies. Students enrolled will participate in career development activities, reflection on the application of their knowledge for a future career and submit a final portfolio project.

Prerequisites: INDP 102<sup>C</sup> and INDP 318<sup>D</sup>

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

Enrollment limited to students with department of Nonprofit Mgt, Empower&Div Stu or Interdisciplinary Programs.

## Italian (ITAL)

**ITAL 101 - Italian Language and Culture I**

A broad and practical working foundation in the language.

Credits: 3

Thematic Thread(s): Transfer Thread Completion Course

**ITAL 102 - Italian Language and Culture II**

A broad and practical working foundation in the language.

Prerequisite: ITAL 101<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Thematic Thread(s): Transfer Thread Completion Course

**ITAL 103 - Italian Language and Culture III**

A broad and practical working foundation in the language.

Prerequisite: ITAL 102<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Thematic Thread(s): Transfer Thread Completion Course

**ITAL 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**ITAL 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

**ITAL 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

**ITAL 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

**ITAL 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

**ITAL 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

**ITAL 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

**ITAL 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ITAL 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ITAL 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ITAL 490 - Independent Study**

Students have an opportunity to study selected areas in greater concentration. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ITAL 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ITAL 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Japanese (JAPN)

**JAPN 101 - Japanese Language and Culture I**

This course is the first in a three course series which will provide an introduction to the Japanese language.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

**JAPN 102 - Japanese Language and Culture II**

This course is the second in a three course series which will provide an introduction to the Japanese language.

Prerequisite: JAPN 101<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

**JAPN 103 - Japanese Language and Culture III**

This course is the third in a three course series which will provide an introduction to the Japanese language.

Prerequisite: JAPN 102<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

**JAPN 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**JAPN 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**JAPN 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**JAPN 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**JAPN 202 - Intermediate Japanese I**

Comprehensive review of Japanese language with emphasis on developing the students' abilities for proficient oral and written accomplishments.

Prerequisite: JAPN 103<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**JAPN 215 - Topics in Japanese Culture**

This course provides deeper knowledge of Japanese culture by examining selected topics in Japanese culture. This course is taught in English.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

**JAPN 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**JAPN 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**JAPN 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**JAPN 300 - Reading & Writing Japanese**

This course reviews hiragana, katakana, romaji, and kanji characters to develop and enhance Japanese reading and writing skills.

Prerequisite: JAPN 103 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**JAPN 303 - Professional Japanese**

This course acquaints the student with formal registers and forms of communication used in all professional communication in Japan. There are no prerequisites for this course.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**JAPN 305 - Japanese Popular Culture**

This course explores various facets of Japanese popular culture such as anime, manga, Japanese video games, etc. It is relevant to all student in all levels across disciplines. This course is taught in English.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**JAPN 315 - Japanese Study Abroad**

This course is designed for students who wish to study Japan/ Japanese society firsthand. Students will study the culture, literature, history, art, and other socio-political issues concerning the country where the program is offered. There are no prerequisites for this course.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**JAPN 330 - Samurai Culture Through Film**

This course examines the samurai culture, their history, and their impact on Japan through films depicting the samurai. Samurai films will be a major component of the course in addition to other activities such as videos, readings, writings, and discussions. This course is taught in English. No prior knowledge is expected.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**JAPN 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**JAPN 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**JAPN 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**JAPN 490 - Independent Study**

Students have an opportunity to study selected areas in greater concentration. The nature of the topic is selected and its treatment are determined in consultation with the instructor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**JAPN 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**JAPN 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Korean (KORN)

**KORN 101 - Korean Language and Culture I**

This course is the first in a three course series which will provide an introduction to the Korean language.

Credits: 3

Thematic Thread(s): Transfer Thread Completion Course

**KORN 102 - Korean Language and Culture II**

This course is the second in a three course series which will provide an introduction to the Korean language.

Prerequisite: KORN 101<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Thematic Thread(s): Transfer Thread Completion Course

**KORN 103 - Korean Language and Culture III**

This course is the third in a three course series which will provide an introduction to the Korean language.

Prerequisite: KORN 102<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Thematic Thread(s): Transfer Thread Completion Course

**KORN 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**KORN 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

**KORN 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

**KORN 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

**KORN 202 - Intermediate Korean I**

Comprehensive review of Korean grammar with emphasis on developing the students' abilities for proficient oral and written accomplishments.

Prerequisite: KORN 103<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

**KORN 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

**KORN 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

**KORN 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

**KORN 306 - Modern Korean Civilization**

Course analyzes the most significant characteristics, foreign influences, and cultural traditions that have comprised Korean culture since 1900. Course will be taught in English and is open to all interested students.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**KORN 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**KORN 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**KORN 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**KORN 490 - Independent Study**

Students have an opportunity to study selected areas in greater concentration. The nature of the topic selected and its treatment are determined in consultation with the instructor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**KORN 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**KORN 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Leadership (LEAD)

**LEAD 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1 or Freshman 2 may **not** enroll.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**LEAD 144 - Introduction to Cognitive Studies**

The goal of Cognitive Studies is to understand the mind using insights from a variety of fields including Psychology, Computer Science, Linguistics, Philosophy, Anthropology, Sociology, and Neuroscience. Cognitive Science is by definition an interdisciplinary field. The class will cover mental processes such as perception, reasoning, memory, attention, imagery, language, intelligence, thinking, decision-making, and consciousness using an interdisciplinary approach that fits within a liberal arts perspective.

Credits: 3

Term(s) Typically Offered: Offered Summer & Winter Terms

Thematic Thread(s): Transfer Thread Completion Course

**LEAD 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**LEAD 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**LEAD 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed



**LEAD 215 - Introduction to Consciousness**

This class will survey theories of consciousness and self through the scope of a broad range of fields: Neurophysiology, Cognitive Psychology, Philosophy, Artificial Intelligence, Evolutionary Psychology and Physics. Consciousness and the sense of self will be explored and viewed from a number of different disciplines using an interdisciplinary approach.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Conservation, Technology & Imagination, Human Diversity & Well-Being, Transfer Thread Completion Course

**LEAD 244 - Artificial Intelligence in Cognitive Studies and Film**

Artificial intelligence (AI) is the study of how to realize human intelligence on a computer. Philosophically, it is concerned with replicating consciousness and self-recognition in machines. The goal of AI is to make a computer that can learn, plan, and solve problems. This course will cover fundamental knowledge for understanding AI. We will introduce the history of AI in Cognitive Science and how it has been explored in various popular films.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course

**LEAD 251 - Leadership Theory**

A survey of the nature, purpose and leadership of human institutions: why and how people organize; organizational environments, forms, structures, processes, leadership, communication, ethical, and societal impacts.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Transfer Thread Completion Course

**LEAD 253 - Online Practical Research**

Students will participate in a leadership workshop online where they will examine 10 leaders via case studies and keep a portfolio with a summation of their findings regarding the various leaders and their actions with respect to the organizational development theory studies in the Introduction to Leadership Course. The course instructor will supervise the students and certify that they met the requirements in the following areas: leadership development, group service, and field-work experience.

Prerequisites: INDP 251<sup>C</sup> or CSLD 251<sup>C</sup> or LEAD 251<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2.

**LEAD 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**LEAD 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**LEAD 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**LEAD 315 - Mindfulness and Brain**

Cognitive Science is the interdisciplinary study of the mind, perception, and sense of self. Many practices in Mindfulness can impact both the mind and body. The several books and research projects on the topic reflect this connection. This class will explore how meditation, mindfulness, Tai Chi and Yoga can affect the brain using an interdisciplinary approach within a liberal arts perspective.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**LEAD 344 - Left and Right Brain: From Neuron to Culture**

This class will explore the differences between the left and right sides of the brain. The class begins with differences in anatomy and physiology and will conclude with how these differences affect personality, culture, art, music, science, and politics. The emphasis will be an interdisciplinary approach within a Liberal Arts framework.

Credits: 3

Thematic Thread(s): Conservation, Technology & Imagination, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**LEAD 350 - Multicultural Leadership**

Multicultural Leadership compares leadership across cultures and countries, explores the relationship between culture and leadership styles, ideas of cultural diversity and globalization, and a variety of considerations with implications for leading within and across national borders and global regions. This course also explores the challenging but increasingly important task of working across cultures in teams composed of persons from different cultures, ethnicities, racial identifications, and religious and social backgrounds.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**LEAD 351 - Leadership Practicum**

Students will participate in leadership and campus student organization and/or sanctioned activities and will keep a journal relating their activities to leadership and organizational development theory studied in the Introduction to Leadership course. The course instructor will supervise the students and certify that they met the requirements in the following areas: leadership development, group service and field-work experience.

Prerequisites: INDP 251<sup>D</sup> or PROF 250<sup>D</sup> or CSLD 251<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**LEAD 352 - Self Leadership**

Before an individual can lead other people or organizations, they must first be able to lead themselves effectively. Self Leadership is a course designed to introduce students to processes, tools and strategies to overcome obstacles and to achieve goals.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**LEAD 353 - Teambuilding for Leaders**

Teambuilding for Leaders exposes students to the techniques, processes and tools to effectively build, lead and motivate multifaceted group of individuals and galvanize them into a functional and effective team oriented on achieving mutually supporting goals.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**LEAD 354 - Strategic Planning and Decision Making for Leaders**

Strategic Planning and Decision Making for Leaders introduces students to a process of planning that helps leaders apply thoroughness, clarity, sound judgment, logic, and professional knowledge to understand situations, develop options to solve problems, and reach decisions. This process helps leaders, their staffs, and others think critically and creatively while planning.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**LEAD 355 - Leadership Development Course**

Strategic Planning and Decision Making for Leaders introduces students to a process of planning that helps leaders apply thoroughness, clarity, sound judgment, logic, and professional knowledge to understand situations, develop options to solve problems, and reach decisions. This process helps leaders, their staffs, and others think critically and creatively while planning.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**LEAD 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered Every Term

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**LEAD 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**LEAD 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**LEAD 450 - Internship**

Supervised placement in selected professional agencies.

Credits: 1-12

Term(s) Typically Offered: Offered Every Term

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**LEAD 456 - Research in Cognitive Science**

The goal of Cognitive Science is to understand the mind using insights from a variety of fields including Psychology, Computer Science, Linguistics, Philosophy, Anthropology, Sociology, and Neuroscience. Cognitive Studies is by definition an interdisciplinary field. Interdisciplinary research comprises a major component to the field. In this course, students will gain experience by conducting a research project.

Prerequisites: (INDP 144<sup>C</sup> or CSLD 144<sup>C</sup> or LEAD 144<sup>C</sup>) and INDP 318<sup>C</sup>  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**LEAD 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**LEAD 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**LEAD 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Library Science (LIBR)

**LIBR 110 - Introduction to Library & Information Resources**

An asynchronous course introducing the resources of the university library and use of subject-related library materials as well as evaluation and ethical use of information resources. Students will develop skills in locating, selecting, citing, and analyzing academic and popular sources.

Credits: 1

Term(s) Typically Offered: Offered Every Term

**LIBR 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**LIBR 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**LIBR 210 - Library Research Methods**

An introduction to the research process inducing methods for identifying, retrieving, and evaluating information. The aim of this course is to identify an informal need and locate, evaluate, and use appropriate resources. The focus on implementing effective strategies for finding relevant information including the selection and effective use of Bailey Library resources.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

**LIBR 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**LIBR 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**LIBR 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor. Prerequisites: Permission of the instructor

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## Management (MGMT)

**MGMT 130 - Dynamics of Global Commerce**

Exploration of the challenges of business operations in the global marketplace. Topics discussed include the business, economic, social, and political aspects of the global marketplace. This may include, but not be limited to, topics such as e-commerce, entrepreneurship, sustainability, and business ethics.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Thematic Thread(s): Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

**MGMT 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**MGMT 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MGMT 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**MGMT 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MGMT 219 - Business Analytics I**

Probability and statistics in a business environment, encompassing descriptive statistics, probability theory, hypothesis testing, linear regression and correlation. Cross-listed as ECON 219.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MGMT 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MGMT 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**MGMT 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MGMT 303 - Issues in Global Business**

This course will focus on fundamental issues in the modern globalization of business. The topics covered will include the cultural environments in which business work, politics and law in global business, economic integration, global trade and investment, global finance, global operations and managing global businesses. A special emphasis will be placed on the challenges and opportunities presented to global businesses by the social, political and economic diversity encountered in the global marketplace.

Prerequisites: ECON 201<sup>D</sup> and ECON 202<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 319 - Business Analytics II**

This course introduces various methods on how to analyze large sets of business data in order to uncover potential business opportunities. Students will learn both predictive analytics and prescriptive analytics. The predictive analytics include trend analysis, forecasting techniques, data mining, and spreadsheet modeling. Prescriptive analytics covers linear optimization and decision analysis. Business software such as productivity software, data visualization, and business intelligence software will be heavily used as a main focus of learning.

Prerequisites: (ECON 219<sup>D</sup> or MGMT 219<sup>D</sup> or STAT 152<sup>D</sup> or BUSA 219<sup>D</sup>) and (MATH 113<sup>D</sup> or MATH 115<sup>D</sup> or MATH 117<sup>D</sup> or MATH 118<sup>D</sup> or MATH 122<sup>D</sup> or MATH 123<sup>D</sup> or MATH 125<sup>D</sup> or MATH 131<sup>D</sup> or MATH 210<sup>D</sup> or MATH 225<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

**MGMT 320 - Operations Management**

Operations strategy and competition, production systems and processes, decision analysis and graphical linear programming, quality management and process control, facility location and layout, work methods and measurement, inventory management and project evaluation review technique (PERT).

Prerequisites: (MGMT 219<sup>D</sup> or BUSA 219<sup>D</sup> or ECON 219<sup>D</sup>) or (MATH 152<sup>D</sup> or STAT 152<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 341 - Organizational Leadership**

This course will include a combination of leadership theory, practice, and application to contemporary organizations. Major challenges will be discussed including the strengths and weaknesses of these firms and ways in which organizational effectiveness can be improved. We will discuss the inextricable relationship between leadership and diversity and the essential nature of a diverse workforce for maximum success through the empowerment of people. Concepts such as strategic thinking, self-leadership, change and globalization are included.

Prerequisite: MGMT 351<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Summer & Winter Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 351 - Organizational Behavior**

Study of the satisfaction, motivation, learning, problem solving and growth of persons in organizational settings. Conceptual learning is combined with self-analysis in each area.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 352 - Supply Chain Management**

Management science analysis and optimization techniques including linear programming, transportation algorithm, waiting line models, simulation processes, network models, materials requirement planning, and forecasting methods applied to a variety of business operations situations.

Prerequisite: MGMT 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall, Winter, & Summer

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 353 - Development of Management Thought**

Contemporary management as the result of an evolutionary process involving the thoughts and writings of many famous management theoreticians and practitioners.

Prerequisite: MGMT 351<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 354 - Human Resources Management**

A survey course emphasizing aspects of the basic processes of HRM including principles, policies, tools and techniques utilized in the human resource function in any organization. Managing human capital encompasses recruiting, hiring, training, development, compensation, and performance management. Managing individuals and groups that include a diversity of backgrounds throughout each function, are core human resource activities and are incorporated in this class through a variety of techniques.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 357 - International Operations Management**

Issues critical to globalization of manufacturing operations including global planning and organization, comparison of operations, international operations strategy, managerial issues in global operations.

Prerequisites: MGMT 351<sup>D</sup> and MGMT 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 360 - Total Quality Management**

Managerial and technological issues that are necessary to understand and implement quality assurance programs including human resource development, strategic planning, management information systems, cost effectiveness, implementation procedures and statistical quality control.

Prerequisites: (MGMT 219<sup>D</sup> or BUSA 219<sup>D</sup> or ECON 219<sup>D</sup> or MATH 152<sup>D</sup> or STAT 152<sup>D</sup>) and MGMT 351<sup>D</sup> and (MRKT 230<sup>D</sup> or MRKT 330<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 364 - Recruitment and Selection**

Components of an effective selection program including job analysis, employment testing, and selection interviews with emphasis on the legal issues and relevant federal regulations.

Prerequisite: MGMT 354<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**MGMT 370 - Sustainable Entrepreneurship and Innovation**

This integrative course introduces students to issues related to sustainable new venture creation. It includes topics such as the importance of innovation and creativity in opportunity recognition and the design of sustainable business models, industry/market analysis, resource acquisition and disposition, assessing a venture's financial strength, and ethical legal issues. Students will learn the entrepreneurial process while acknowledging multiple stakeholders and addressing social, economic and environmental concerns.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 415 - Supply Chain Analytics**

Supply chain analytics is the process of synthesizing massive amounts of data from procurement, production, warehouse, distribution, and consumption to assess and improve supply chain performance. Types of supply chain analytics included in this course are descriptive analytics, predictive analytics, prescriptive analytics, and cognitive analytics.

Prerequisites: MGMT 320<sup>C</sup> and MGMT 352<sup>\*C</sup> (may be taken concurrently).  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1 or Senior 2.

**MGMT 449 - Sustainable Management Internship**

Supervised placement, work, and research in selected public and private organizations.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment is limited to students with a program in Sustainable Management or Sustainable Management.

**MGMT 450 - Internship**

Supervised placement, work, and research in selected public and private organizations.

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 451 - Employment Law**

This course covers the law as it applies to all aspects of the employer - employee relation, including union activity, discrimination, selection, testing and employment contracts.

Prerequisites: MGMT 351<sup>D</sup> or MGMT 250<sup>D</sup> or MGMT 251<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 452 - Management-Labor Relations**

Modern industrial relations from the perspective of both management and labor, including the historical development of large-scale business and organized labor.

Prerequisite: MGMT 351<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 453 - Collective Bargaining**

The major issues in the negotiation process: bargaining, public policy implications, impasse resolution, strikes, and legislation affecting collective bargaining.

Prerequisite: MGMT 351<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 454 - Management Seminar**

Contemporary methods and theories of management are discussed in terms of current organizational practice.

Prerequisites: MGMT 320<sup>D</sup> and MGMT 354<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 455 - Compensation Management**

Rationale, composition and administration of employee reward systems considering both the internal organizational factors and external environmental factors. Contemporary issues such as comparable worth, CEO salaries, and the rising cost of benefits are included.

Prerequisite: MGMT 354<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 456 - Management and Society**

This course will engage students in exploring the social, ethical, environmental, economic, and political/legal restraints on organizational decision-making that managers face today. Students will develop critical thinking, communication and managerial skills necessary to be effective in a business world, where multiple stakeholder interests must be addressed.

Prerequisite: MGMT 351<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 457 - International Management**

Examination of environments, resources, strategies and models of managerial functions in international organizations.

Prerequisite: MGMT 351 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 458 - Business Capstone**

Business Capstone uses a web-based business simulation as a learning tool to enhance student understanding of the interaction and influence of an organization's competitive strategy and policy on the functional area of business. Course material includes the sources of competitive advantage, cross-functional integration and management's commitment to ethics and diversity.

Prerequisites: ACCT 209<sup>D</sup> and (ACCT 210<sup>D</sup> or ACCT 310<sup>D</sup> or ACCT 322<sup>D</sup>) and ECON 201<sup>D</sup> and ECON 202<sup>D</sup> and FIN 320<sup>D</sup> and (ECON 219<sup>D</sup> or BUSA 219<sup>D</sup>) and MGMT 320<sup>D</sup> and MGMT 351<sup>D</sup> and (MRKT 330<sup>D</sup> or MRKT 230<sup>D</sup>) and (ECON 319 (may be taken concurrently)<sup>D</sup> or MGMT 319 (may be taken concurrently)<sup>D</sup> or MATH 123 (may be taken concurrently)<sup>D</sup> or MATH 125<sup>\*D</sup> or MATH 225<sup>\*D</sup>) and (ACCT 340 (may be taken concurrently)<sup>D</sup> or BUSA 340 (may be taken concurrently)<sup>D</sup>) and (FIN 303 (may be taken concurrently)<sup>D</sup> or MRKT 303 (may be taken concurrently)<sup>D</sup> or BUSA 303 (may be taken concurrently)<sup>D</sup> or MGMT 303 (may be taken concurrently)<sup>D</sup>) and (CPSC 365 (may be taken concurrently)<sup>D</sup> or MIS 365 (may be taken concurrently)<sup>D</sup> or MIS 265<sup>\*D</sup>) (may be taken concurrently).

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

**MGMT 459 - Sustainable Business Consulting**

In this course student teams engage in field-based consulting to analyze actual problem situations involving sustainability for regional businesses.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

**MGMT 460 - Training and Development**

Training and development as a human resource management function supporting organizational strategic planning including: training needs analysis, training program objectives, training methods, management and organization development methods, program evaluation and cost-benefit analysis, and training budgeting. Current trends in training and development will be covered including computer based training, competency based training and cross cultural training.

Prerequisite: MGMT 354<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 465 - Management of Information Technology**

Management and specific technical concepts and techniques applied to the function of providing information technology services to the organization.

Prerequisite: MGMT 351<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 490 - Independent Study**

In-depth reading and/or research with the guidance of a faculty member in an area selected by the student. Prerequisites: 12 credits in major courses, application, and permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MGMT 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Management Information Systems (MIS)

**MIS 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**MIS 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MIS 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MIS 210 - Productivity Software**

An in-depth, practical study of existing productivity software packages that focuses primarily on decision-support systems for microcomputers. Projects will involve the use of intermediate and advanced features of various software packages, as well as the use of several packages in finding computer-based solutions to information storage and retrieval problems.

Credits: 3

Term(s) Typically Offered: Offered Every Term

**MIS 211 - Information Systems Application Development**

The purpose of this course is to introduce the students to the fundamental concepts and models of application development so that they can understand the key processes related to building functioning applications and appreciate the complexity of application development. Students will learn the basic concepts of program design, data structures, programming, problem solving, programming logic and fundamental design techniques for event-drive programs. Program development will incorporate the program development life cycle: gathering requirements, designing a solution, implementing a solution in programming language and testing the completed application.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**MIS 265 - Management Information Systems**

Managerial and technological issues that are necessary to understand, establish, manage and use information systems in all functional areas of organizations.

Prerequisites: CPSC 210<sup>D</sup> or MIS 210<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**MIS 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MIS 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MIS 300 - Challenges of Computer Technology**

An in-depth study of the critical issues related to the computerization of society. Ethical, legal, and moral issues raised by the evolution of computer technology will be discussed.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MIS 301 - Practical Computer Security**

A practical introduction to the threats present to the online, electronic community, and how to protect yourself and your organization from them.

We will explore the connectivity structure of the Internet, along with the security and criminal threats to members of the online community. The legal, ethical and technical issues related to threats such as viruses, worms, and identity theft will be covered.

Prerequisites: CPSC 099<sup>D</sup> or CPSC 110<sup>D</sup> or CPSC 130<sup>D</sup> or CPSC 100<sup>P</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>P</sup> Requires minimum grade of P.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MIS 310 - Business Data Analysis and Visualization**

This course covers how data analysts can process data sets from a variety of sources to create information that guides leaders in crafting strategy and tactics which allow an organization to survive and thrive in a turbulent environment. Students will review how business data analysis has been successfully used in the past and learn appropriate processes and a variety of techniques to accomplish effective analyses. Emphasis is on analyzing data, visualizing and interpreting the results of those analyses and translating results into clear and simple insights to aid managerial decision making.

Prerequisites: MIS 210<sup>C</sup> or STAT 152<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

**MIS 323 - Data Base Systems**

Database Systems is a study of relational database concepts as applied to comprehensive information systems. These concepts include data design; modeling; normalization; the use of Structured Query Language (SQL) to define, manipulate and test the database; programmatic access to a database; and practical issues faced by database developers.

Prerequisites: CPSC 130<sup>D</sup> or CPSC 146<sup>D</sup> or CPSC 210<sup>D</sup> or MIS 210<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Information Systems.

**MIS 328 - Exploring Big Data for Business I**

Due to the explosion of social media and the computerization of every aspect of social and economic activity, large volumes of structured and unstructured data currently exist. They include weblogs, videos, speech recordings, photographs, health data, e-mails, Tweets and business data. Also, improvements in technology have led to the development of powerful computers that can store and process large volumes of data. This course is to introduce students to the essential information systems and technologies used in manipulating, storing, and analyzing big data. Students will be familiar with highly scalable systems that can be used to accept, store, and analyze large volumes of unstructured data in batchmode and/or real-time.

Prerequisites: MIS 210<sup>C</sup> and (ECON 219<sup>C</sup> or MGMT 219<sup>C</sup>) and (MIS 323<sup>C</sup> or CPSC 323<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

Enrollment limited to students in a Bachelor of Science degree.

Enrollment limited to students in the College of Business college.

**MIS 333 - Introduction to Computer Forensics**

This is a fundamental course which covers computer forensics. This class covers methods and tools for gaining forensic information from computer systems and networks. It includes case studies of cyber crimes as well as the application and management of cyber forensics. The course introduces students to forensics tools using hands-on experience and the Internet.

Prerequisites: CPSC 099<sup>P</sup> or CPSC 100<sup>P</sup> or CPSC 110<sup>D</sup> or CPSC 130<sup>D</sup> or CPSC 210<sup>D</sup> or MIS 210<sup>D</sup> or PE 202<sup>D</sup>

<sup>P</sup> Requires minimum grade of P.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MIS 353 - Business Data Communications and Technologies**

This course provides an introduction and overview of computer networks and data communications. provides an understanding of the underlying concepts of computer networking, email, instant messaging (e.g. texting, multimedia messaging). Introduces several software packages used in business data communications. Emphasis is placed on terminology, techniques and issues in business data communications.

Prerequisites: CPSC 210<sup>D</sup> or MIS 210<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MIS 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1, Freshman 2 or Sophomore 1.

**MIS 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MIS 401 - Information Systems Security**

This course covers key bodies of knowledge and specializations in security and privacy associated with information systems. The course explores the management of various technologies in emerging areas of information assurance including computer and network security, digital forensics, cryptography and biometrics. course concepts include information Assurance, Information Security Governance and Risk Management, Operations Security, Cryptography, Access Control, Physical Security, Telecommunications Security, Business Continuity and Disaster Recovery Planning, Legal and Ethical Issues.

Prerequisites: CPSC 301<sup>D</sup> or MIS 301<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MIS 403 - Introduction to Healthcare Information Systems**

This course will give an introduction to computer-based information systems as they are applied to the health care industry. Topics will include characteristics of health care data, design and life cycle of HCIS, the information technology supporting HCIS and management issues.

Prerequisites: CPSC 210<sup>D</sup> or MIS 210<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MIS 413 - Systems Analysis**

A course in computer-based information systems. Course content includes: foundations of information science, techniques for system development, information architectures, and resource allocations. Case studies are discussed and utilized as class projects.

Prerequisites: CPSC 323<sup>D</sup> or MIS 323<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MIS 423 - Advanced Business Database Systems**

This course will provide students with advanced skills in database implementation and management with a focus on business systems. It will provide students with a hands-on experience of client-server databases, and the skills to develop one using reputable enterprise relational database management system. They will develop knowledge of creating, querying and maintaining relational database. Students will also learn to use advanced Structured Query Language (SQL) extensively to create integrated business systems to access, retrieve and manipulate business data. Students taking this course are expected to have a basic understanding of relational database concepts, and knowledge of a programming language.

Prerequisite: MIS 323<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

Enrollment limited to students in a Bachelor of Science degree.

Enrollment limited to students with the QUIE attribute.

Enrollment limited to students in the College of Business college.

Enrollment limited to students with department of Info Systems & Technology Mgt.

**MIS 428 - Exploring Big Data for Business II**

This course focuses on Big Data tools and technologies. It is for students who want to become conversant with the terminology and the core concepts behind big data problems, applications, and systems. It is for those who want to start thinking about how utilizing big data might be useful in their business or career. Students will gain skills to implement data-driven approach to decision-making, develop big data solutions to create business intelligence and competitive advantage through the use of analytical techniques and Big Data.

Prerequisites: MIS 210<sup>D</sup> and (ECON 219<sup>D</sup> or MGMT 219<sup>D</sup>) and (MIS 323<sup>D</sup> or CPSC 323<sup>D</sup>) and MIS 328<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

Enrollment limited to students in a Bachelor of Science degree.

Enrollment limited to students with the QUIE attribute.

Enrollment limited to students in the College of Business college.

Enrollment limited to students with department of Info Systems & Technology Mgt.

**MIS 443 - Project Management**

An introduction to project management in the information systems, or IT development, area. Provides an understanding of the purpose, methods and benefits of process management by exposing the student to the concepts, practices, processes, tools and techniques used in process management for software development.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**MIS 450 - Internship**

Professional work experience performed as an intern at selected agencies supervised both by the agency and by the Computer Science Department.

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MIS 453 - Fundamentals of Enterprise Architecture**

This course explores the design, selection, implementation and management of enterprise IT solutions. The focus is on applications and their fit with the hosting organization.

Prerequisites: MIS 323<sup>D</sup> and MIS 413<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MIS 490 - Independent Study**

Supervised study in a special interest area. Prerequisites: Two computer science courses selected from 370 or above, permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MIS 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Marine Science (MARS)

**MARS 110 - Introduction to Oceanography**

An introduction to marine sciences with emphasis on physiography of the ocean basins, waves, tides, near-shore processes, the physical and chemical nature of seawater, circulation, characteristics of marine plant and animal communities, history of oceanography, and law of the sea.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MARS 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MARS 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**MARS 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MARS 200 - Art Workshop-Painting of the Coastal Area**

This workshop is to be an intensive involvement with the esthetic qualities of the seashore and its environs. Paintings using various media (watercolor, oils, acrylics) according to personal preference will be created. Slides and other reproductions of relevant paintings by artists of historical importance will be examined and discussed.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MARS 201 - Art Workshop-Pewter and Marine Jewelry**

This workshop will explore pewter and objects found in the near-shore environment as materials for making jewelry and body ornaments. Participants will learn techniques of casting, fabricating, soldering, tinning and bezel setting for the purpose of creating unique pieces.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MARS 204 - Writing about the Sea**

A survey of literature from several genre, both fiction and nonfiction, which focuses on maritime themes and topics.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MARS 211 - Field Methods in Oceanography**

A course to familiarize students with the dynamic marine environment and field work on board small research vessels, to instruct in the use and application of standard oceanographic instruments and sampling devices and to promote and encourage independent research through the initial stages of scientific projects.

Prerequisites: MARS 110<sup>D</sup> or EGE0 131<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MARS 212 - Navigation**

This course covers navigation, i.e. the art and science of safely bringing a boat from one position to another in a body of water. Topics covered are piloting, navigation within sight of land, electronic navigation, radio bearings by radio direction finder, LORAN, OMEGA, radar, celestial navigation, circles of equal altitude, navigational triangle, celestial lines of position, celestial fix, Greenwich Mean Time, Greenwich Hour Angle.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MARS 215 - Marine Wildlife Photography**

This class includes an in-depth study of the science of photography and how this relates to the field work of marine biology. The student will develop skills in micro- and macrophotography and an understanding of the science of optics, filter and camera techniques, and darkroom procedures and techniques. The class will learn various chemical processes for color and black/white photography. Specific articles on marine science photography will be used to develop an understanding both within the marine science laboratory and in the field.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MARS 221 - Marine Invertebrates**

A study of the invertebrate phyla with emphasis on development, reproduction, structure, function and classification of selected marine organisms. Laboratory field experience will be given in collection, preservation and classification of the phyla.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MARS 241 - Marine Biology**

A study of plant and animal life in the marine environment. Emphasis will be on physical and chemical environmental factors affecting the biota in the inter-tidal, open water, and benthic habitats. Common biota characteristic of each habitat will be investigated in terms of their natural history, morphology, and ecological relationships.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MARS 250 - Wetland Ecology**

The ecology and management of wetland wildlife with emphasis on the management of wetlands as ecological systems.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MARS 260 - Marine Ecology**

A study of the ecology of marine organisms, the relationship of plants and animals to physical, chemical and bio-logical factors and their zonation and communities.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MARS 270 - Coastal Vegetation**

In-depth examination of vegetation falling under the marine influence. Identification of same and determination of factors limiting and controlling their distribution.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MARS 280 - Field Biology**

An introduction to basic principles of ecology and natural history of selected plants and animals in terrestrial, freshwater, and marine environments. Course is suitable for non-science majors.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MARS 285 - Recreation Management/Development in the Coastal Zone**

This course focuses on the recreation component of coastal zone management. The nature, extent, location, and value of coastal recreation behavior will be probed and related to the overall coastal management framework.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MARS 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MARS 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**MARS 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MARS 300 - Behavior of Marine Organisms**

Concepts of ethology; discussion and observation of the influences of external and internal factors on the regulation and control of behavior of organisms living in the marine coastal environment.

Prerequisites: BIOL 113<sup>C</sup> and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 310 - The Mammals of Coastal Ecosystems**

Distribution, behavior, physiology, adaptations, and ecological relationships of mammals with special emphasis on the mammals of the Delmarva Peninsula. In addition to the lectures and seminars, the laboratory and field work will deal with the productivity, population dynamics, species diversity, ecoenergetics, and behavior of local mammals.

Prerequisites: BIOL 113<sup>C</sup> and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 320 - Marine Microbiology**

A survey of methods and concepts of marine microbiology. Attention will be given to technical aspects of sample collection, microbial ecology of the marine environment, enrichment culturing, methods of enumeration and identification with emphasis on marine bacteria.

Prerequisite: BIOL 330<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 330 - Tropical Invertebrates**

An introduction to tropical invertebrates. A variety of collection and observation methods will be used to sample near-shore and reef areas. Emphasis will be on systematics and ecology using the communities approach. One week at Wallops will be intensive review of general systematics and ecology of marine invertebrates. The last two weeks in Florida will involve sampling and identifying species and describing ecological communities.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 331 - Chemical Oceanography**

Treatment of a wide range of oceanic chemical phenomena, including salinity and age of the oceans, sources and residence times of chemical constituents in seawater, geochemical cycles of mineral resources and trace elements. Sampling and laboratory analysis techniques.

Prerequisites: MARS 110<sup>D</sup> or EGE0 131<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 342 - Marine Botany**

A study of marine and marine fringe plants of the Middle Atlantic Coast, their taxonomy, ecology, distribution, life histories, physiology, and economic status. Techniques of collecting, preserving, identifying and herbarium cataloging will be stressed. Exercises in plant ecology and marine microbiology will be included.

Prerequisites: BIOL 113<sup>C</sup> and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 343 - Marine Ichthyology**

A study of the fishes. Specimens collected along the eastern seaboard by the students will be used to illustrate the anatomy, physiology and systematics of this major vertebrate group. Field collections will also give students the opportunity to observe the relationships of these animals to their biotic and physical environment.

Prerequisites: BIOL 113<sup>C</sup> and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 344 - Anatomy of Marine Chordates**

A course designed to familiarize the students with the qualitative aspects of the speciation process; to lay ground work for understanding the basic and specialized structure of marine chordates; to trace the most obvious or important trends (and their functional significance) in the evolution of this basic structure in various vertebrate lines. The laboratories will be devoted primarily to dissection of representative marine vertebrates, particularly those collected live on field trips.

Prerequisites: BIOL 113<sup>C</sup> and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 345 - Ornithology**

Introduces the student to avian fauna of the seacoast and at the same time enables comparison with inland species. In addition to the field work providing visual and vocal identification, lecture material will include information on the distribution, behavior, physiology, and anatomy of birds.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 350 - Physiology of Marine Invertebrates**

Mechanisms and regulation of organ function in marine invertebrates with emphasis on homeostasis. Invertebrate examples of fundamental principles and of unique physiological mechanisms.

Prerequisites: BIOL 113<sup>C</sup> and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 362 - Marine Geology**

Structure and sedimentology of the ocean basins and shores; methods of exploration, general feature of the ocean basins, and theory of ocean basin evolution.

Prerequisites: MARS 110<sup>D</sup> or EGE0 131<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 364 - Physical Oceanography**

A study of the physical properties of the oceans to include: mass and energy budgets; theory of distribution of variables; cause, nature, measurement, analysis and prediction of tides, currents and waves; basic instrumentation in field work.

Prerequisites: MARS 110<sup>D</sup> or EGEO 131<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 394 - Comparative Physiology of Marine Organisms**

This course will provide an introduction to the physiology of marine organisms utilizing a comparative approach. The lecture will introduce the topics of respiration, circulation, metabolism, osmoregulation, thermoregulation, locomotion and sensory systems by drawing comparisons between the mechanisms and strategies utilized by a wide range of marine organisms. Laboratory and field work will focus on the physiological responses of marine plants and animals to common environmental stresses such as salt load, temperature variation, depletion of dissolved oxygen, and tidal flux. This will be accomplished through measurements and observations in the field, as well as through experimental manipulations in a laboratory setting.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisites: BIOL 113<sup>C</sup> and BIOL 114<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 420 - Marine Micropaleontology**

Designed for students majoring in either biological or geological sciences, the course will deal with modern, living representatives of micro-organisms important in the fossil record. Particular emphasis will be on the taxonomy, morphology, evolution and ecological affinities of the Foraminifera (Sarcodina), but other groups, including the Radiolaria, Diatoms and Ostracoda, will also be considered. Laboratory and field aspects will include sample collecting, preparation and analysis.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 431 - Ecology of Marine Plankton**

Study of the phytoplankton and zooplankton in marine and brackish environments. Qualitative and quantitative comparisons will be made between the planktonic populations of various types of habitats in relation to primary and secondary productivity.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 432 - Marine Evolutionary**

The study of the ecological mechanisms underlying evolutionary processes. This course is broad in scope and requires that students synthesize both evolutionary and ecological concepts and theory into an understanding of how organisms adapt to their environment. Marine, estuarine, and maritime organisms will be used as model systems and processes, which affect marine populations, will be emphasized.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 441 - Biology of Molluscs**

The Mollusca is the second largest group of animals and perhaps the most diverse in terms of morphological, ecological and behavioral variations. This course offers an evolutionary, functional, and ecologic approach to studying this important group of organisms.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 451 - Coastal Environmental Oceanography**

This course examines the interaction of biological, chemical, physical, geological and ecological ocean processes as applied to coastal environments. Emphasis is placed on environmental management issues of the coastal zone. Topics include water quality analysis, barrier island geology and ecology, estuarine pollution, beach defense and biological implications in areas of coastal up welling and coastal fronts. Specific cases in coastal pollution will be examined from coastal environments around the U.S., including Kepone in the James River, VA, DDT on the Palos Verde Shelf, CA., Eutrophication on the North Carolina Coast, The Exxon-Valdex Oil spill and *Pfisteria* in the coastal waters of N.C. and VA. Cross listed as MARS551.

Prerequisites: MARS 110<sup>D</sup> or EGEO 131<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 457 - Marine Geophysics**

A study of the basic geophysical theories about the transmission of shock waves, and gravity and magnetic fields to the understanding and exploration of the continental shelves and marine basins. The student is introduced to the use and limitations of the portable seismic refraction seismograph, gravity meter, and magnetometer.

Prerequisites: MARS 110<sup>D</sup> or EGEO 131<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 458 - Exploration Methods in Marine Geology**

A study of geophysical and geologic instruments and techniques used to penetrate the water layer obscuring the ocean bottom topography and geology and the results of some of that effort. Emphasis is on laboratory and field assignments using basic geophysical and geological instruments. The students are introduced to the use, limitations and results of these instruments.

Prerequisite: EGEO 101<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 459 - Coastal Geomorphology**

A study of coastal environments with an emphasis on understanding the inter-relationship among land forms, processes and materials. The student will participate in field studies conducted along high and low wave energy environments.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 464 - Biological Oceanography**

Interdisciplinary study of the interactions between biological communities and the ocean environment as seen by distributions of coastal plankton, fish, and benthic invertebrates. Projects will involve boat trips to sample populations and to quantitatively document environmental variables with state of the art equipment, laboratory and field experiments to determine rate processes, and visits to nearby field and government laboratories. Examples of project topics include transport of plankton at barrier island passes, effect of submarine banks on fish populations, ground truth data for satellite imagery, and other current topics in biological oceanography.

Prerequisites: MARS 110<sup>D</sup> or EGEO 131<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 490 - Independent Study**

Independent research under the guidance of a faculty member.

Prerequisite: Permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. (repeatable up to 6 credits) Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MARS 491 - Coral Reef Ecology**

A study of coral reef structure, formation, types, and the relationships of reef organisms to their environment. Emphasis is given to species diversity, identification, symbioses, and effects of temperature, salinity, light, nutrient concentration, predation, and competition on the abundance and the distribution of coral reef organisms.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 492 - Marine Mammals**

A study of the distribution, population ecology, behavior, physiology and adaptations of marine mammals. Student projects will entail collecting physiological and behavioral data at field sites and at facilities studying marine mammals.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**MARS 493 - Behavioral Ecology**

Designed to present animal behavior within an ecological and evolutionary context. Presents mathematical and theoretical framework of behavioral ecology. An in-depth exploration of the ways in which the behavior of animals is influenced by the environment, especially with regard to resource distribution.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 494 - Marine Aquaculture**

This course will include the theory and practice of raising organisms for food and for the aquarium trade. Techniques for raising economically important organisms from the egg stage to marketable size and their food supplies will be studied.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MARS 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Marketing (MRKT)

**MRKT 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**MRKT 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MRKT 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**MRKT 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MRKT 230 - Principles of Marketing**

An analytical overview of market decision-making including product, pricing, place, and promotional strategies considering the heterogeneity and diversity of customers and markets with respect to their demographic, geographic, psychographic, cultural, and behavioral characteristics.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1 may **not** enroll.

**MRKT 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MRKT 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**MRKT 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MRKT 303 - Issues in Global Business**

This course will focus on fundamental issues in the modern globalization of business. The topics covered will include the cultural environments in which business work, politics and law in global business, economic integration, global trade and investment, global finance, global operations and managing global businesses. A special emphasis will be placed on the challenges and opportunities presented to global businesses by the social, political and economic diversity encountered in the global marketplace.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 331 - Distribution Management**

Principles, methods and problems relating to wholesaling, retailing and physical distribution management.

Prerequisites: MRKT 230<sup>D</sup> or MRKT 330<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 332 - Business Marketing**

A management perspective of the internal and external environments affecting the demand for industrial goods; marketing intelligence and control; and marketing strategy for product, service, channel, price, and promotional components.

Prerequisites: MRKT 330<sup>D</sup> or MRKT 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 333 - Consumer Behavior**

The buying process with emphasis on economic, social, cultural and psychological determinants of consumer choice.

Prerequisites: MRKT 330<sup>D</sup> or MRKT 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 334 - Advertising Management**

Management of advertising, including background, roles, planning, media strategy, message, testing, research, evaluation, and administration of advertising.

Prerequisites: MRKT 330<sup>D</sup> or MRKT 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 335 - Retail Management**

Store location and layout, retail personnel management, merchandising policies and control, and marketing strategy.

Prerequisites: MRKT 330<sup>D</sup> or MRKT 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 336 - Professional Selling**

Provides foundations of sales processes and management to prepare students for careers in selling or sales management.

Prerequisites: MRKT 330<sup>D</sup> or MRKT 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 338 - E-Commerce**

The role, structure, organization, and use of the Internet as a channel of distribution to conduct electronic commerce.

Prerequisites: (MRKT 230<sup>D</sup> or MRKT 330<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 425 - Marketing Analytics**

Marketing analytics is the process of analyzing and utilizing data from the four P's of marketing promotion, placement, product, and pricing for marketing decision making and to assess and improve marketing performance. Types of marketing analytics included in this program are descriptive, predictive, prescriptive, and cognitive.

Prerequisites: MRKT 430<sup>D</sup> and ECON 319<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

**MRKT 430 - Marketing Research**

Research methodology as a managerial tool used in problem solving and decision making in marketing.

Prerequisites: (MGMT 219<sup>D</sup> or BUSA 219<sup>D</sup> or ECON 219<sup>D</sup>) and (MRKT 330<sup>D</sup> or MRKT 230<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 431 - Marketing Seminar**

Advanced topics in marketing with emphasis on the analysis and solution of marketing problems.

Prerequisites: MGMT 320<sup>D</sup> and MRKT 332<sup>D</sup> and MRKT 333<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 437 - International Marketing**

The marketing issues of firms engaged in international business with emphasis on strategies for successful foreign market penetration.

Prerequisites: MRKT 330<sup>D</sup> or MRKT 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 450 - Internship**

Supervised placement, work, and research in selected public and private organizations.

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 490 - Independent Study**

In-depth reading and/or research with the guidance of a faculty member in an area selected by the student. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MRKT 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Mathematics (MATH)

**MATH 113 - Mathematics as a Liberal Art**

A cultural enrichment course, which introduces topics and applications from different branches of mathematics.

Prerequisites: (ACSD 110<sup>C</sup> or ESAP 110<sup>C</sup>) or minimum score of Y in 'WAIVE ACSD110 W HIGHER MATH'

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Every Term

**MATH 115 - Financial Mathematics**

Methods of solving problems arising from the growth of money through simple and compound interest. Savings accounts, loans, financing, mortgages, depreciation, bonds, pensions and life insurance are included.

Prerequisites: (ACSD 110<sup>C</sup> or ESAP 110<sup>C</sup>) or minimum score of Y in 'WAIVE ACSD110 W HIGHER MATH'

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Thematic Thread(s): Transfer Thread Completion Course

**MATH 117 - Quantitative Reasoning**

Quantitative reasoning is the application of basic mathematical skills to the analysis and interpretation of real-world quantitative information to draw conclusions that are relevant to people in their daily lives. In this course, students will explore various quantitative models and their interpretations in a way that emphasizes mathematical and statistical reasoning skills. Conceptual understanding will be stressed over manipulative skills. Students will learn to create sophisticated arguments supported by quantitative evidence and clearly communicate them in a variety of formats (using words, tables, graphs, mathematical equations, etc.) as appropriate. Technology, such as spreadsheets, will also be used. This course satisfies the Quantitative Reasoning requirement in the Rock Studies Program. This course is graded A, B, C, NC.

Prerequisites: (ACSD 110<sup>C</sup> or ESAP 110<sup>C</sup>) or minimum score of Y in 'WAIVE ACSD110 W HIGHER MATH'  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

**MATH 118 - Elementary Geometry**

A survey of Euclidean geometry and related elementary geometrical concepts. This course is not appropriate for those planning to teach geometry at the secondary level, but would be an excellent choice for those who will be teaching mathematics in the elementary school.

Prerequisites: (ACSD 110<sup>C</sup> or ESAP 110<sup>C</sup>) or minimum score of Y in 'WAIVE ACSD110 W HIGHER MATH'  
<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment is limited to students with a program in Early Childhood Ed (PK-4), Early Childhood Educ-Int'l Ed, School Wellness Education, Health-Physical Educ Teaching, Health and Physical Education, Early Child-Spec Ed-Intl Ed, Early Child/Spec Ed(PK-4)PK-8), Sec Education-English(7-12), Sec Education-French (K-12), Mid Level-Engl&Lang Arts (4-8), Mid Level-Mathematics (4-8), Mid Level-Social Studies (4-8), Middle Level-Science (4-8), Sec Ed-Social Stud-Hist (7-12), Secondary Educ-Spanish (K-12), Music Education (K-12), Music Educ-Voice (K-12), Music Educ-Saxophone (K-12), Music Educ-Instrumental (K-12), Music Educ-Piano (K-12), Elementary School Mathematics, Middle School Mathematics or Art With Certification (K-12).

**MATH 120 - Intermediate Algebra**

Linear functions, equations, inequalities, polynomials, algebra of functions, rational exponents, quadratic equations and inequalities, systems of equations.

Prerequisites: (ACSD 110<sup>C</sup> or ESAP 110<sup>C</sup>) or minimum score of Y in 'WAIVE ACSD110 W HIGHER MATH' or minimum score of 30 in 'ALEKS PPL Assessment'

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer

**MATH 122 - Finite Mathematics with Matrices**

The algebra of matrices with applications in linear optimization, algebraic and graphical solutions.

Prerequisites: MATH 120<sup>D</sup> or MATH 199<sup>D</sup> or minimum score of 60 in 'ALEKS PPL Assessment'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MATH 123 - Introduction to Applied Calculus**

The course is compatible with the background and interests of students not majoring in the physical sciences or mathematics. The theorem-proof approach of differential calculus is replaced with the explanation-example approach. The course includes an introduction to exponential and logarithmic functions, limits, derivatives, maxima/minima, and Lagrange multipliers, and applications from business, economics, and finance. Problem-solving with mathematical software will also be emphasized.

Prerequisites: MATH 120<sup>D</sup> or MATH 111<sup>D</sup> or MATH 199<sup>D</sup> or MATH 125<sup>D</sup> or minimum score of 60 in 'ALEKS PPL Assessment'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MATH 125 - Precalculus**

A bridge between high school algebra and calculus involving polynomial, trigonometric, logarithmic, exponential functions, complex numbers, and the conic sections.

Prerequisites: MATH 120<sup>D</sup> or MATH 199<sup>D</sup> or minimum score of 560 in 'SAT MATH SECTION SCORE' or minimum score of 23 in 'ACT Math' or minimum score of 60 in 'ALEKS PPL Assessment'

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Fall, Spring, & Summer

**MATH 131 - Discrete Mathematics**

This course begins the study of the language and concepts needed for higher-level mathematics. Students will learn principles of logic, focusing on logical forms, truth tables, and statement calculus. Students will analyze examples of and complete calculations involving sets, relations, and functions. Students will also receive an introduction to counting techniques and recursion. This course is not a proof-based course.

Prerequisites: MATH 125<sup>D</sup> or MATH 225<sup>D</sup> or MATH 230<sup>D</sup> or minimum score of 75 in 'ALEKS PPL Assessment'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**MATH 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**MATH 180 - Introduction to Mathematical Software**

An introduction to the appropriate use of mathematical software with emphasis on problem solving. Topics will include mathematical concepts from calculus, linear algebra, and differential equations.

Prerequisite: MATH 225 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered as Needed

**MATH 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MATH 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**MATH 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MATH 210 - Mathematics for Elementary Teachers I**

This course is designed for future K-8 teachers to explore number systems (including definitions, operations, and properties of whole numbers and fractions), numeration systems, proportionality, algebraic thinking, and problem-solving. Emphasis is on conceptual understanding in addition to procedural skill.

Prerequisites: (ACSD 110<sup>D</sup> or ESAP 110<sup>D</sup>) or minimum score of Y in 'WAIVE ACSD110 W HIGHER MATH'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1 may **not** enroll.

Enrollment is limited to students with a program in Early Childhood Ed (PK-4), Early Childhood Educ-Int'l Ed, School Wellness Education, Health-Physical Educ Teaching, Health and Physical Education, Early Child/Spec Ed(PK-4)PK-8), Early Child/Spec Ed(PK-4)PK-12, Sec Education-English(7-12), Sec Education-French (K-12), Mid Level-Eng&Lang Arts (4-8), Mid Level-Mathematics (4-8), Mid Level-Social Studies (4-8), Middle Level-Science (4-8), Sec Ed-Social Stud-Hist (7-12), Secondary Educ-Spanish (K-12), Special Education (PK-12), Music Education (K-12), Music Educ-Voice (K-12), Music Educ-Saxophone (K-12), Music Educ-Instrumental (K-12), Music Educ-Piano (K-12), Elementary School Mathematics, Middle School Mathematics or Art With Certification (K-12).

**MATH 225 - Calculus I**

This course begins the study of calculus of functions of one variable.

Students will study limits and continuity of real-valued functions.

Students will explore the derivative as a rate of change and learn how to calculate derivatives of algebraic and transcendental functions.

Applications of the derivative to various physical and other phenomena will be considered. This course also provides an introduction to Riemann integration.

Prerequisites: MATH 125<sup>C</sup> or minimum score of 75 in 'ALEKS PPL Assessment'

<sup>C</sup> Requires minimum grade of C.

Credits: 4

Term(s) Typically Offered: Offered Fall, Spring, & Summer

**MATH 230 - Calculus II**

This course continues the study of calculus of real-valued functions

of one variable. Students will learn various techniques of evaluating antiderivatives and approximating definite integrals. These integrals will be used in various applications such as calculating areas and volumes, arc length, work, and solving simple first-order differential equations.

Parametric and polar equations and their differential and integral calculus are also considered. Students will also investigate sequences and series, their convergence properties, and the use of power series to represent functions.

Prerequisite: MATH 225<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 4

Term(s) Typically Offered: Offered Fall, Spring, & Summer

**MATH 231 - Calculus III**

This course continues the study of calculus with the study of functions

of several variables. Students will learn about the geometry of two- and three-dimensional space, vector-valued functions, and functions of several variables. Students will investigate these functions with partial derivatives and multiple integration. Vector calculus topics such as

Green's, Stokes, and the Divergence Theorems will be covered. Computer software such as Mathematica will be used in problem solving in this course.

Prerequisite: MATH 230<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 4

Term(s) Typically Offered: Offered Fall & Spring Terms

**MATH 232 - Linear Algebra**

In this class, students will learn techniques for solving systems of linear equations and related matrix equations. Vectors and vector spaces will be considered along with properties relating to solving matrix equations.

In particular, special care will be taken with real vector spaces and inner product spaces, and how they are used to solve problems with applications in physics and other fields. The eigenvalue/eigenvector problem will also be discussed. Students will be expected to use technology to solve problems in this class.

Prerequisite: MATH 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms



**MATH 235 - Foundations of Mathematical Proof**

This course provides a foundation for writing mathematical proofs. Students will work with common proof techniques such as direct proof, proof by contrapositive, proof by contradiction, and proof by induction, along with the logical bases supporting them. In developing their proof-writing skills, students will work with foundational mathematical concepts such as basic set theory, relations between sets, and functions.

Prerequisites: MATH 225<sup>C</sup> and MATH 131<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**MATH 240 - Linear Algebra and Differential Equations**

Computational aspects of matrices, determinants, systems of linear equations, vector spaces, linear dependence, Wronskian, characteristic values, elementary differential equations, separable and exact equations, linear differential equations with constant coefficients.

Prerequisite: MATH 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**MATH 280 - Theory of Interest**

A rigorous, calculus based treatment of the Theory of Interest, including simple and compound interest, annuities, bonds, yield rates, amortization schedules and sinking funds, yield curves, and practical applications. This course is intended to prepare students for the Society of Actuaries examination on the theory of interest.

Prerequisite: MATH 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**MATH 281 - Actuarial Exam Preparation I**

The purpose of this course is to prepare students for The Society of Actuaries" (SOA) first professional examination. Topics will be selected from the SOA syllabus which currently includes general probability theory, univariate and multivariate probability distributions (discrete and continuous), applications involving insurance and risk analysis, and supporting topics from Calculus.

Credits: 1

Term(s) Typically Offered: Offered as Needed

**MATH 282 - Actuarial Exam Preparation II**

The purpose of this course is to prepare students for The Society of Actuaries" (SOA) second professional examination. Topics will be selected from the SOA syllabus which currently includes time value of money, yield rates, methods of loan repayment, annuities, asset/liability management, immunization, duration, convexity, bonds, stocks, mutual funds, capital budgeting, short sales, spot and forward rates, options, derivatives, futures, and arbitrage.

Prerequisite: MATH 280<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered as Needed

**MATH 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MATH 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**MATH 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MATH 301 - Differential Equations I**

First and second order differential equations, existence and uniqueness theorems, Laplace transforms, systems of linear ordinary differential equations.

Prerequisite: MATH 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 302 - Differential Equations II**

A continuation of MATH 301. Series solutions of ordinary differential equations, non-linear systems and stability, partial differential equations.

Prerequisite: MATH 301<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 304 - Geometric Structures**

Finite and infinite axiomatic systems, including Euclidean and projective geometrics.

Prerequisite: MATH 235<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 310 - Mathematics for Elementary Teachers II**

This course is designed for future K-8 teachers to continue to explore number systems (including definitions, operations, and properties of integers, rational and real numbers), descriptive statistics, basic probability, and measurement and related geometry. Emphasis is on conceptual understanding in addition to procedural skill.

Prerequisite: MATH 210<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Early Childhood Ed (PK-4), Early Childhood Educ-Int'l Ed, School Wellness Education, Health-Physical Educ Teaching, Health and Physical Education, Early Child/Spec Ed(PK-4)PK-8), Early Child/Spec Ed(PK-4)PK-12, Sec Education-English(7-12), Sec Education-French (K-12), Mid Level-Engl&Lang Arts (4-8), Mid Level-Mathematics (4-8), Mid Level-Social Studies (4-8), Middle Level-Science (4-8), Sec Ed-Social Stud-Hist (7-12), Secondary Educ-Spanish (K-12), Special Education (PK-12), Music Education (K-12), Music Educ-Voice (K-12), Music Educ-Saxophone (K-12), Music Educ-Instrumental (K-12), Music Educ-Piano (K-12), Elementary School Mathematics, Middle School Mathematics or Art With Certification (K-12).

**MATH 311 - Deterministic Models of Operations Research**

Topics include deterministic methods in operations research. Linear programming, duality, integer programming, dynamic programming, nonlinear programming, inventory theory, transportation and assignment and network theory.

Prerequisites: MATH 231<sup>C</sup> or MATH 240<sup>C</sup> or (MATH 122<sup>C</sup> and MATH 230<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 312 - Stochastic Models of Operations Research**

Decision making under uncertainty. Probability, Markov Chains, Poisson processes, Survival Analysis, Queueing Systems, Random Walk, Branching.

Prerequisites: MATH 231<sup>C</sup> or MATH 240<sup>C</sup> or (MATH 122<sup>C</sup> and MATH 230<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 313 - Introductory Analysis I**

This course begins the rigorous mathematical study of the real numbers. Topics include cardinality of sets; sequences of real numbers; completeness of the real numbers; topology of the real line including open sets, closed sets, and compact sets; and continuous, real-valued functions. Students will be expected to communicate using mathematical proofs throughout the course.

Prerequisites: MATH 231<sup>C</sup> and MATH 235<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 314 - Introductory Analysis II**

This course continues the rigorous mathematical treatment of the real numbers that begins in MATH 313. The concepts of differentiation and Riemann integration of real-valued functions on the real line from calculus are explored and made rigorous. Additionally, series of functions are explored, including convergence (pointwise and uniform) and Taylor series. Students will be expected to communicate using mathematical proofs throughout the course.

Prerequisite: MATH 313<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 315 - Numerical Mathematics**

The mathematics of computation and approximation, interpolation, calculating the roots of equations, curve fitting linear systems, numerical differentiation and integration and error analysis.

Prerequisites: MATH 240<sup>D</sup> or MATH 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**MATH 316 - Advanced Methods of Operations Research**

Topics include Brownian motion, stationary processes, weak convergence of stochastic processes, regenerative phenomena, random walks, simulations.

Prerequisite: MATH 312<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 317 - Complex Variables**

Complex numbers, analytic functions, complex integration, convergence of sequences and series, and applications.

Prerequisite: MATH 231<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 320 - Theory of Numbers**

A study of the properties of natural numbers and number theoretic functions.

Prerequisite: MATH 235<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 325 - Abstract Algebra I**

An introduction to groups. Topics include integers mod  $n$ , cyclic groups, permutation groups, normal subgroups, isomorphisms, finite Abelian groups.

Prerequisite: MATH 235<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 326 - Abstract Algebra II**

An introduction to rings. Topics include integral domains, fields, polynomial rings.

Prerequisite: MATH 325<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 331 - Mathematical Methods of Physics**

Applications in physical science and engineering of the following: vector analysis, complex variables, Fourier and Laplace transforms, linear algebra, and some boundary value problems. Cross-linked as PHYS 331. This course may be counted as a physics course or as a mathematics course, but not both.

Prerequisites: PHYS 211<sup>D</sup> and MATH 240<sup>D</sup> and MATH 231<sup>\*D</sup> (may be taken concurrently).

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 335 - Mathematical Modeling**

A general introduction to mathematical modeling involving optimization, dynamic and probabilistic models. Specific topics selected from dimensional analysis, optimization techniques, continuous and discrete modeling, stability analysis, linearization, eigenvalue methods, qualitative analysis, Markov chains, regression models, simulation techniques, and others as time permits.

Prerequisite: MATH 231<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 403 - Elementary Topology**

Topological properties of the real line.

Prerequisites: MATH 309<sup>D</sup> and MATH 313<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 406 - Intermediate Analysis**

Selected topics.

Prerequisite: MATH 314<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 411 - Partial Differential Equations**

This course in partial differential equations has wide-ranging applications in a variety of fields such as engineering and physics. Topics include first order equations and the method of characteristics; an introduction to Fourier series; second order equations including the heat, wave, and Laplace equations; numerical methods for computing solutions; conservation laws.

Prerequisites: MATH 231<sup>C</sup> and MATH 301<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 482 - Actuarial Mathematics**

Interest rate models, including the Vasicek and Cox-Ingersoll-Ross bond price models, rational valuation of derivative securities, simulation and risk management techniques.

Prerequisites: MATH 231<sup>D</sup> and MATH 280<sup>D</sup> and (MATH 353<sup>D</sup> or STAT 353<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 484 - Life Contingencies**

An introduction to survival models, individual life insurance and life annuities including determining premiums and reserves using a stochastic approach. It will include multiple life theory, binomial models, geometric Brownian motion and simulation in option pricing. It will develop a theoretical basis of contingent payment models and the application of those models to insurance risk.

Prerequisites: MATH 231<sup>D</sup> and MATH 280<sup>D</sup> and MATH 353<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 490 - Independent Study**

Supervised study in advanced area. Prerequisites: Two 300-level mathematics courses, a 3.000 QPA in major, permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 491 - Mathematics Seminar**

Designed to broaden the students' backgrounds by investigating topics in mathematics not usually taught in the regular curriculum. Students may elect to take course up to three times.

Prerequisite: MATH 235<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MATH 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Mechanical Engineering (MECH)

**MECH 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**MECH 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MECH 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

### **MECH 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

### **MECH 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

### **MECH 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

### **MECH 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

### **MECH 310 - Machines and Mechanisms**

Analysis of motion and forces in linkages and mechanisms. Synthesis of plane mechanisms, analysis of cams, gears and gear trains. Fundamentals of vibrations in machines. Analysis techniques include graphical, analytical and computational methods.

Prerequisite: ENGR 240<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### **MECH 320 - Manufacturing Processes**

Introduction to properties and uses of engineering materials. Introduction to mechanical testing methods, metrology, tolerances, testing and inspection; semi-finished product manufacturing; macro-processing (forming, casting, powder metallurgy, metal working, composite fabrication); joining; nontraditional manufacturing processes; and surface processing.

Prerequisites: ENGR 220<sup>D</sup> and ENGR 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### **MECH 330 - Introduction to Mechatronics**

Selection of mechanical and electronic components and integration of these components into complex systems. Hands-on laboratory and design experiments with components and measurement equipment used in the design of mechatronic products.

Prerequisite: ENGR 310<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### **MECH 340 - Heat Transfer**

One-, two-, three-dimensional steady state conduction; transient conduction; free and forced convection; radiation; heat exchangers; heat and mass transfer by analytical, numerical analogical and experimental methods; design of thermal systems.

Prerequisites: ENGR 320<sup>D</sup> and MATH 301<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### **MECH 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### **MECH 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

### **MECH 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**MECH 410 - Machine Design**

Application of fundamental engineering principles to the design of various elements found in machines. Elements include connections, shafts, keys, couplings, springs, gears, belts, chains, bearings, clutches, brakes, screws, etc.

Prerequisite: MECH 310<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 411 - Mechanical Control Systems**

Introduction to theory of feedback and control. Performance and stability of linear systems. Design of feedback control systems. Practical application and introduction to state-space methods.

Prerequisites: ENGR 310<sup>D</sup> and MECH 410<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 412 - Finite Element Analysis**

Modern analysis techniques used to investigate a variety of systems in engineering and science. Computational models of problems are developed using energy concepts, structural mechanics, and matrix operations. The methods used are implemented using a general finite element program and the accuracy of the results is evaluated. The learned theoretical approach is applied to common structural elements such as trusses, beams, frames, and plates.

Prerequisite: ENGR 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 420 - Design and Manufacturing**

Manufacturing methods and operations. The interaction between design and manufacturing stressed in terms of drawing specifications versus process capability and tolerances, including standards applications and 1redesign for producibility.

Prerequisite: MECH 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 421 - Mechanical Vibrations**

Introduction to mechanical vibrations: single and multi-degree of freedom systems, free and forced vibrations, impedance and modal analysis including applications.

Prerequisites: MECH 410<sup>D</sup> and ENGR 240<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 422 - Thermal System Design**

Device design and system design of compressors, turbines, heat exchangers, piping systems, internal combustion engines, and other component equipment. Optimization including thermo-economic evaluation and energy analysis.

Prerequisite: MECH 340<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 423 - Additive Manufacturing**

Introduction to technologies and processes used to translate virtual solid model data into physical models for prototyping and end-use manufacturing applications. Discussion of design tools and design considerations for additively manufactured components.

Prerequisite: MECH 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 430 - Mechatronics**

Instrumentation and measurements emphasizing systems that combine electronics and mechanical components with modern controls and microprocessors. First and second order behavior, transducers and intermediate devices, measurement of rapidly changing engineering parameters, microcontrollers and actuators.

Prerequisite: MECH 330<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 431 - Introduction to Robotics**

Introduction to robots and their types. Homogeneous transformations. Kinematic equations and their solutions. Motion trajectories, statics, dynamics, and control of robots. Robot programming. Actuators, sensors and vision systems.

Prerequisites: ENGR 310<sup>D</sup> and MECH 330<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 440 - HVAC Systems**

The analysis and design of heating air conditioning systems. Topics include: psychometrics, comfort & health, heating and cooling loads, solar radiation, air distribution systems and refrigeration.

Prerequisites: MECH 340<sup>D</sup> and ENGR 301<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 441 - Sustainable Energy**

The technical, economic, environmental and physical resources constraints of energy sources are discussed in terms of both national and global development needs. The current states of both non-renewable and renewable technologies are presented in terms of their potential contribution to sustainable energy resources required for continued viable economic development.

Prerequisite: ENGR 320<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 460 - Capstone Design I**

Capstone Design course is the culmination of the educational experience in Mechanical Engineering. The courses require students to draw upon all previous coursework and cultivate new skills in order to solve complex design problems associated with an assigned group project. This is the first course of a year-long design experience.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment limited to students with department of Physics and Engineering.

**MECH 461 - Capstone Design II**

Capstone Design course is the culmination of the educational experience in Mechanical Engineering. The courses require students to draw upon all previous coursework and cultivate new skills in order to solve complex design problems associated with an assigned group project. This is the second course of a year-long design experience.

Prerequisite: MECH 460<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Mechanical Engineering.

Enrollment limited to students in the College of Engineering & Science college.

**MECH 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MECH 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Military Science (Army ROTC) (MS)

**MS 100 - The American Military Experience**

Establishes a framework of reference regarding military service, an understanding of the profession of arms and its impact on and place in American society. The course begins the Army's leadership development process. Includes a lab. ++

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

**MS 102 - Principles of Leadership**

This course continues the student's introduction to the military organization and begins to teach leadership techniques and principles using military situations as a point of reference. Various academic studies of civilian-based leadership theories and styles are examined and compared to military theories and styles. Includes a lab. ++

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**MS 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**MS 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MS 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**MS 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MS 201 - Basic Military Skills**

Begins to teach basic military skills such as map reading, land navigation using a map and compass, first aid, weapons marksmanship, drill and small unit tactics. Includes a lab. ++

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**MS 202 - Intermediate Military Skills**

Continues instruction in map reading, land navigation using a map and compass, first aid, weapons marksmanship, drill and small unit tactics. Begins to integrate all skills into leading small units in tactical situations. Includes a lab. ++

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**MS 209 - Evolution of Modern Military Art**

A survey of the development of all branches of the American military spanning the colonial period to present day, this course includes a brief introduction to the development of the western way of war from pre-Hellenistic conflict through the Middle Ages in Europe. Technological innovation, evolution of tactical through strategic levels of warfare, and the symbiotic relationship between military development, national policy, and societal expectations will be examined.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MS 250 - ROTC Basic Leadership Practicum**

A five week experience of training and evaluation conducted in a tactical framework at Fort Knox, Kentucky. Students learn basic military skills which enable them to take advanced military science courses on campus.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MS 280 - Leadership Seminar**

This course involves individualized instruction, research and presentation on research in areas required to fill in a students knowledge base to be able to move into the ROTC advanced course. This course may be taken only once.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MS 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MS 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**MS 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MS 301 - Fundamentals of Tactical Operations**

Focuses on tactics at the squad level. Students learn the troop leading procedures and how to give both oral and written operations orders. Students continue to enhance their skills at land navigation and rifle marksmanship. Physical fitness conditioning is a mandatory part of the laboratory. Includes a lab. ++

Credits: 4

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MS 302 - Advanced Military Skills**

Continues development of intermediate level cadet leader skills in preparation for attendance at the Leadership Development and Assessment Course at Ft. Lewis, Washington. The course is supplementary in scope and includes leadership, written and oral communications, operations and tactics, land navigation, weapons, and radio and wire communications subjects. A laboratory experience is required. ++

Credits: 4

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MS 350 - ROTC Advanced Leadership Practicum**

A five week experience of training and evaluation conducted in a tactical framework at Fort Lewis, Washington. Cadets demonstrate and learn advanced military skills. Cadets also demonstrate their leadership skills in a variety of leadership positions in tactical and non-tactical environments.

Prerequisites: MS 301<sup>D</sup> and MS 302<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MS 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MS 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MS 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MS 401 - Leadership Dimensions and Concepts**

This course begins the transition from cadet to officer. Focus is on organization of the Army, command and staff functions, officer and noncommissioned officer evaluation system, military law and development of training. Students participate in a staff ride to a significant military battlefield. Includes a lab. ++

Credits: 4

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MS 402 - Officership and the Profession of Arms**

This course continues the transition from cadet to officer. Students begin a critical analysis of the role of the officer and the noncommissioned officer, and their interaction, at the platoon, company and battalion level. Students are introduced to joint operations and conduct some critical analysis of national military policy. Includes a lab. ++

Credits: 4

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MS 450 - The Cadet Troop Leadership Internship**

A three-week experience as a leader in a U.S. Army unit, under the close supervision of a U.S. Army lieutenant or captain. It gives the student the opportunity to lead real soldiers in a real U.S. Army unit. The intern will actually supervise the planning and execution of the unit's scheduled training.

Prerequisites: MS 301<sup>D</sup> and MS 302<sup>D</sup> and MS 350<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MS 490 - Independent Study**

In-depth reading and research in an area of particular interest to the student with the guidance of an individual faculty member. This course may be taken only once. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MS 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MS 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Modern Languages (MODL)

**MODL 105 - Introduction to Asian Civilizations**

This course is an introductory, interdisciplinary course designed to give students a broad understanding of the geographic, historical and religious, cultural, artistic, social, political and economic forces that shape Asia. No prior knowledge is expected. This is a Liberal Studies, Global Community, Non-US course.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Transfer Thread Completion Course, United States in Global Context

**MODL 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**MODL 151 - Self-Instructional Languages**

Self-Instruction in basic language is open to serious students with previous language background. The course is designed to develop the speaking, listening comprehension of the student on a basic level. Course may be repeated in each language up to a maximum of three credits. Not applicable for modern language requirement or liberal studies. Students may choose from any world languages not available in the regular offerings.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MODL 180 - Introduction to World Cultures**

This course introduces the study and understanding of World Cultures through the examination of different cultural products that people in specific cultures of the world have created, along with different practices/traditions they perform and their interconnection to the perspectives, worldviews, and identities of that specific world community. This course is taught in English.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**MODL 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MODL 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**MODL 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MODL 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MODL 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**MODL 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MODL 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MODL 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MODL 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MODL 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**MODL 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MODL 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Music (MUSI)

**MUSI 029 - Clinical Integration Lab**

This is a laboratory experience associated with Clinical Integration MUSI 229.

Corequisite(s): MUSI 229

Credits: 0

Term(s) Typically Offered: Offered Fall & Spring Terms

**MUSI 102 - Exploring World Music**

A course designed to survey non-Western musical traditions and practices. Emphasis is given to the music of India, Russia, Japan, Africa, the Middle East, and the American Indian.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Transfer Thread Completion Course, United States in Global Context

**MUSI 104 - Exploring American Music**

A survey course designed to develop student knowledge and understanding of music composed and performed in the United States between 1620 and the present.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 105 - Exploring Jazz**

The stylistic development of jazz and its relevance to society.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**MUSI 106 - Introduction to Jazz Performance**

This course will introduce the high school music student to jazz pedagogy at the university level. Emphasis will be placed on performing skills, theory, improvisation, ear training and music technology. Course may be repeated up to four credits.

Credits: 1

Term(s) Typically Offered: Offered Summer Terms

**MUSI 107 - Fundamentals of Music**

Understanding and using music notation and terminology.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

**MUSI 108 - Flute Camp**

The SRU "Flute Camp" will give high school flutists an opportunity to be on the SRU campus during the Summer Arts Academy for an intensive 2 week program involving all aspects of flute performance. Follow up involvement of the high school students during the fall semester will consist of their attendance at flute related university events and critical writing about the concerts/rehearsals/master classes they observed during the fall component.

Credits: 1

Term(s) Typically Offered: Offered Summer Terms

**MUSI 109 - Jazz Combo**

Students will meet weekly with the appropriate faculty member to work on jazz performance in the small group (combo) setting. Study of phrasing, articulation, jazz theory, improvisation, and other jazz performance practices will be addressed. Students will be auditioned at the beginning of the semester for placement. At least one public performance will be given per semester. One hour of rehearsal time per week. One credit for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 111 - Introduction to Music Education**

This course is designed to introduce the student to the field of music education. This course will be an introduction to planning and preparation for teaching music, including creating an effective classroom environment for teaching music, instructional delivery in music, historical background relevant to music education, copyright laws in the music classroom, instructional planning, diversity, and advocacy. Students will complete their Field Experience Level 1: Observation hours as a requirement of this course.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course

**MUSI 113 - Saxophone Quartet**

Students will meet weekly with the appropriate faculty member to work on literature selected for their performance ability level. Study of phrasing, articulation, balance, blend, intonation, and other performance practices will be addressed. Students will be auditioned at the beginning of the semester for placement. At least one public performance will be given per semester. Two hours per week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 114 - Symphonic Wind Ensemble**

Symphonic Wind Ensemble: A chamber ensemble composed of select musicians chosen by audition, performing contemporary literature as well as transcriptions for winds and percussion. Four and a half hours of week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 115 - Concert Choir**

Auditioned mixed chorus of 50-70 singers that studies and performs a variety of music from Renaissance to 21st century, classical to contemporary, a cappella and music accompanied by piano, chamber groups, and symphonic ensembles. Three hours per week rehearsal time. Multiple concerts are presented both on and off campus and on periodic tours. One to three credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. Entrance is by successful audition, held the first week of classes every semester; contact the instructor for information. The ensemble is also available without credit.

Credits: 1-3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 116 - University Chorus**

University Chorus is a non-auditioned ensemble open to singers from any academic discipline. This ensemble explores the fundamentals of singing and artistry within a collaborative community and through a selection of diverse repertoire. University Chorus has two ensembles that focus on higher voices and lower voices. Each semester, both sections will combine for mixed-voiced instruction on selected repertoire. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 117 - Chamber Singers**

An elite chamber choir of 16-24 outstanding singers who perform challenging repertoire with a greater emphasis on a cappella music. Members of this group are expected to display initiative to prepare music to the highest possible level of their ability. Two and one-half hours per week rehearsal time. One or two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. Entrance is by successful audition, held the first week of classes every semester; contact the instructor for information. The ensemble is also available without credit.

Corequisite(s): MUSI 115

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 118 - Marching Pride**

The Marching Pride performs during the half time at football games, both home and away, and for other special events. Much of its music is specially arranged. Open to all students. Six hours a week rehearsal during the football season. One to six credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 6 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-6

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 119 - Concert Band**

The Concert Band members are carefully selected to provide a balanced instrumentation of the best players. Music written for concert band is the main repertoire. Concerts on campus. Four hours a week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 5 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 120 - Jazz Ensemble**

The SRU Jazz Ensemble performs jazz literature from all eras of jazz history including big band, bop, hard bop, fusion and contemporary. This ensemble often performs with guest artists of national and international stature, both on and off campus. Membership in this ensemble requires an audition. Three hours and forty-five minutes of rehearsal per week. One to three credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 121 - Symphony Orchestra**

Symphony Orchestra is an ensemble of musicians chosen by audition which performs a selection of diverse orchestral repertoire from the Baroque period to the present. Rehearsals will be four hours a week. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 122 - Chamber String Ensemble**

The Chamber String Ensemble is a small ensemble selected for the study and performance of chamber music written for strings. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 123 - Brass Ensemble**

The university's Brass Ensemble is a select ensemble of brass (and percussion) players who study and perform music from all historical periods. Both large brass choir works and small chamber brass works are performed. The ensemble performs on and off campus. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 124 - Woodwind Ensemble**

The Woodwind Ensemble is a small select ensemble of woodwind players who study and perform music for woodwinds from all historical periods. Three hours a week rehearsal time. One credit for every semester of satisfactory participation is granted for this music performance group, with a maximum allowance of ten credits in any one music organization. Additional credits are possible with a waiver from the departmental chairperson. The ensemble is also available without credit.

Credits: 1

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 125 - Percussion Ensemble**

This small select ensemble of percussionists studies and performs music composed and transcribed for both percussion and mallet ensembles. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 126 - Flute Choir**

The SRU Flute Choir is made up of a select group of flutists who will rehearse and perform a variety of music written for flute ensemble. Audition required. Two and a half hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 127 - Orientation to Music Therapy**

Orientation to the field of music therapy through lectures, readings, and viewing music therapy sessions. The course includes an overview of music therapy history, principles, and foundations through a survey of music therapy literature and clinical applications.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms

**MUSI 128 - Applied Alexander Technique**

This course is an introduction to the Alexander Technique in which the students will examine their habitual movement patterns in order to encourage positive energy usage within the body. This technique heightens kinesthetic sensitivity, offering performers a control that is fluid and lively, thus lessening chances of performance injury. The principles of this technique are based on an understanding of human anatomy, which promotes ease, and freedom of movement, balance, flexibility, and coordination. Course may be repeated up to two credits.

Credits: 1

**MUSI 129 - Guitar, Ukulele, & Bass Methods**

A music education course designed to prepare music education majors to teach guitar, ukulele, string bass, and electric bass in elementary and secondary schools. It will also prepare students with the functional skills to use the guitar and ukulele as accompanying instruments.

Credits: 1-2

Term(s) Typically Offered: Offered Fall Terms

Enrollment is limited to students with a program in Music Education (K-12).

**MUSI 130 - Exploring Music**

A survey course designed to develop the student perception and understanding of changing musical styles and practices in Western culture. Studying and experiencing the arts, including dance, music, theatre, and the visual arts, develops creative and aesthetic abilities. The arts introduce students not only to artists and their creations, but also to history, cultures, values, technique, imagination, creativity, and issues relevant to society. Students will gain an understanding of the creative process and how to analyze and interpret message and meaning in works of art. While the arts can bring us pleasure, they can also serve to enlighten and illuminate critical issues, lead to personal discoveries, and foster innovation in all fields. Students will learn to think critically about the arts, develop an appreciation for artistic creations, and by viewing live performances and exhibitions, become engaged audience members. Arts inquiry courses use and develop the analytic and interpretive modes of inquiry needed to understand and explore both tangible and abstract artistic works and the cultures in which they exist. In arts inquiry courses, students confront a variety of cultural and artistic expressions in order to gain an understanding of the human condition, and ultimately express their relationship to artistic work, meaning, and the creative process. Attendance at arts events will be required during this course and may require a fee.

Credits: 3

Term(s) Typically Offered: Offered Every Term

**MUSI 131 - Class Piano I**

For beginners with no previous keyboard experience. Fundamentals of note reading, beginning piano repertoire, melody harmonization and improvisation. Of particular value to the student desiring to gain a working knowledge of the piano either as a classroom tool or for personal use. Music majors only.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with department of Music.

**MUSI 132 - Class Piano II**

Continued development of skills begun in Class Piano I (MUSI 131). Music majors only.

Prerequisite: MUSI 131<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

**MUSI 133 - Class Voice I**

Designed for the purpose of studying basic singing technique and thereby producing a good vocal tone; valuable to the student interested in improving his/her vocal skill. Music majors only.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

**MUSI 134 - Voice Methods**

The pedagogy of singing is emphasized via individual teaching demonstrations thereby enabling students to improve their ability to communicate basic vocal principles to other students. Music majors only.

Prerequisite: MUSI 133<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

**MUSI 137 - Functional Guitar for Music Therapy I**

A study of the fundamental concepts needed to play and teach beginning guitar. Students must provide their own instruments. Music majors only.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

**MUSI 138 - Functional Guitar for Music Therapy II**

Continued development of skills begun in Class Guitar I (MUSI 137). Music majors only.

Prerequisite: MUSI 137<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

**MUSI 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**MUSI 140 - Low Brass Methods**

A study of the fundamental concepts and skills needed to play and teach trombone, baritone horn, euphonium, and tuba to homogeneous and heterogeneous instrument groups in pre-K-12 instrumental music education setting. This includes the integration and application of national and state standards for music education.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students in the College of Liberal Arts college.

Enrollment limited to students with department of Music.

**MUSI 151 - Music Theory and Analysis I**

The student will study the grammar and literature of music through composition, analysis, listening, and performance. Three class meetings each week.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms

**MUSI 154 - Musicianship Skills I**

Students will develop aural and rhythmic skills through basic rhythm reading, sight-singing, intervals and pattern recognition, simple and compound meters, and basic harmonic progressions.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

**MUSI 165 - Applied Performance Voice**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 165, 265, 365 may each be taken two times for a total of 18 credits; MUSI 465 may be taken four times for a total of 12 credits.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Music.

**MUSI 166 - Applied Performance Piano**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 166, 266, 366 may each be taken two times for a total of 18 credits; MUSI 466 may be taken four times for a total of 12 credits.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Music.

**MUSI 167 - Applied Performance Strings**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 167, 267, 367 may each be taken two times for a total of 18 credits; MUSI 467 may be taken four times for a total of 12 credits.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Music.

**MUSI 168 - Applied Performance Woodwind**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 168, 268, 368 may each be taken two times for a total of 18 credits; MUSI 468 may be taken four times for a total of 12 credits.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Music.

**MUSI 169 - Applied Performance Brass**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 169, 269, 369 may each be taken two times for a total of 18 credits; MUSI 469 may be taken four times for a total of 12 credits.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Music.

**MUSI 170 - Applied Performance Percussion**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 170, 270 and 370 may each be taken two times for a total of 18 credits; MUSI 470 may be taken four times for a total of 12 credits.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Music.



**MUSI 179 - Applied Music**

With the approval of the applied music teacher, lessons are available in piano, voice, and any of the standard string, brass, woodwind or percussion instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Music.

**MUSI 181 - Applied Voice**

With the approval of the applied music teacher, lessons are available in voice. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Music.

**MUSI 182 - Applied Strings**

With the approval of the applied music teacher, lessons are available in standard string instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Music.

**MUSI 183 - Applied Brass**

With the approval of the applied music teacher, lessons are available in standard brass instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Music.

**MUSI 184 - Applied Woodwinds**

With the approval of the applied music teacher, lessons are available in standard woodwind instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Music.

**MUSI 185 - Applied Percussion**

With the approval of the applied music teacher, lessons are available in standard percussion instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Music.

**MUSI 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MUSI 192 - Tuba-Euphonium Ensemble**

The SRU Tuba-Euphonium Ensemble is comprised of tuba and euphonium players who rehearse and perform a variety of music written for tuba-euphonium ensemble. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 193 - Jazz Lab Band**

The SRU Jazz Lab Band is a rehearsal ensemble that performs one concert per academic semester. The group does require an audition which takes place in the first week of the Fall semester. If openings occur in the Spring semester, the director will hold an audition for the open seats only. The ensemble rehearses big band literature from every stylistic period in jazz history. The focus of the course is on developing sight-reading, jazz performance practice and techniques, stylistic interpretation, foundational ensemble techniques, jazz band rehearsal techniques, and exposure to the literature, history, and composers of jazz music. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 194 - World Percussion Ensemble**

The SRU World Percussion Ensemble rehearses and performs the percussion music of cultures outside of Western Europe and the United States, concentrating on, but not exclusive to, the Caribbean (Trinidad and Tobago, Cuba, The Dominican Republic, and Puerto Rico), Asia (Japan, India, and Korea), South America (Brazil), and West Africa. Students learn the instruments, techniques, some choreography (when appropriate), and musical styles in multiple genres for at least one public performance each academic semester. The ensemble rehearses and performs on authentic instruments (whenever possible) or modern, commercially available substitutes. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**MUSI 196 - Winter Guard**

The Slippery Rock University Winter Guard is the indoor color guard performing ensemble. In this performing ensemble, students will combine the use of flags, sabers, mock rifles, and other equipment, as well as dance and interpretive movement, in shows for public performance and competition. Held in the spring semester the group performs in competition as part of the indoor marching arts circuit as well as for campus and community events. The course may be repeated up to 5 times. Additional repeats are possible with a waiver from the department chairperson.

Credits: 1-2

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MUSI 199 - Fundamental Skills in Music Therapy**

Designed to prepare music therapy majors in fundamental clinical skills in music therapy necessary for working with a variety of client populations. It includes identifying client needs, delineating goals and objectives, task analysis and treatment strategies (re-creative techniques) through the application of functional music skills. Group processes and leadership techniques appropriate for various clientele.

Prerequisites: MUSI 127<sup>D</sup> and MUSI 137<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

**MUSI 201 - Studies in Children's Music**

Listening, moving, playing instruments, singing and creating using repertoire suitable for children of various developmental levels.

Credits: 3

**MUSI 203 - Musician's Health**

This course is designed for music students, performing arts majors or any student who desires a deeper understanding of musicianship and performing artist wellness. An emphasis on healthy living for the performer including elimination of risk for injury will be discussed. The course will explore concepts such as ergonomics, good posture, and breathing and support. Students will learn about concepts such as effective practicing and the brain's perception of sound. Students will learn to identify and correct problems facing the performer when they arise.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

**MUSI 204 - Art and Science of Performing**

This course focuses on how to define, detect, and manage performance anxiety. Students will learn about the body's innate response to stress and pressure situations, and how to recognize maladaptive responses to pressure situations. Students will learn about conventional methods for treating performance anxiety as well as unconventional methods including self-analysis, meditation, guided imagery, and the Alexander technique. Pre-performance routines such as centering will be discussed. Students will learn about tools such as engaged practicing that will help to produce better performances. The concept of flow state will also be discussed.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

**MUSI 205 - Music in Recreation**

A practical study of the ways and means of planning effective music programs for leisure and recreation and developing the competencies needed by a music leader in recreation.

Credits: 3

**MUSI 206 - Fundamentals of Conducting**

In this course, students will learn the foundational skills necessary to conduct both instrumental and vocal ensembles. As an introductory course, it will serve as a catalyst for developing the lifelong conductor-practitioner regardless of area emphasis - vocal or instrumental. Fundamental skills that will be developed include, but are not limited to: conducting patterns in stationary focal point conducting, expressive gesture, baton technique and basic transpositions.

Prerequisites: MUSI 253<sup>D</sup> and MUSI 256<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with department of Music.

**MUSI 208 - Clarinet and Saxophone Methods**

A study of the fundamental concepts and skills needed to play and teach clarinet and saxophone to homogeneous and heterogeneous instrument groups in pre-K-12 instrumental music education setting. This includes the integration and application of national and state standards for music education.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students in the College of Liberal Arts college.

Enrollment limited to students with department of Music.

**MUSI 209 - Jazz Combo**

Students will meet weekly with the appropriate faculty member to work on jazz performance in the small group (combo) setting. Study of phrasing, articulation, jazz theory, improvisation, and other jazz performance practices will be addressed. Students will be auditioned at the beginning of the semester for placement. At least one public performance will be given per semester. One credit for every semester of satisfactory participation is granted for this music performance group, with a maximum allowance of ten credits in any one music organization. Additional credits are possible with a waiver from the departmental chairperson. The ensemble is also available without credit.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 212 - Fundamentals of Conducting Lab**

This course is the lab component to MUSI 206: Fundamentals of Conducting and will include application of conducting skills through time on the podium.

Prerequisites: MUSI 253<sup>C</sup> and MUSI 256<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students in the College of Liberal Arts college.

Enrollment limited to students with department of Music.

**MUSI 213 - Saxophone Quartet**

Students will meet weekly with the appropriate faculty member to work on literature selected for their performance ability level. Study of phrasing, articulation, balance, blend, intonation, and other performance practices will be addressed. Students will be auditioned at the beginning of the semester for placement. At least one public performance will be given per semester. Two hours per week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 214 - Symphonic Wind Ensemble**

Symphonic Wind Ensemble: A chamber ensemble composed of select musicians chosen by audition, performing contemporary literature as well as transcriptions for winds and percussion. Four and a half hours of week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 215 - Concert Choir**

Auditioned mixed chorus of 50-70 singers that studies and performs a variety of music from Renaissance to 21st century, classical to contemporary, a cappella and music accompanied by piano, chamber groups, and symphonic ensembles. Three hours per week rehearsal time. Multiple concerts are presented both on and off campus and on periodic tours. One to three credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. Entrance is by successful audition, held the first week of classes every semester; contact the instructor for information. The ensemble is also available without credit.

Credits: 1-3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 216 - University Chorus**

University Chorus is a non-auditioned ensemble open to singers from any academic discipline. This ensemble explores the fundamentals of singing and artistry within a collaborative community and through a selection of diverse repertoire. University Chorus has two ensembles that focus on higher voices and lower voices. Each semester, both sections will combine for mixed-voiced instruction on selected repertoire. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 217 - Chamber Singers**

An elite chamber choir of 16-24 outstanding singers who perform challenging repertoire with a greater emphasis on a cappella music. Members of this group are expected to display initiative to prepare music to the highest possible level of their ability. Two and one-half hours per week rehearsal time. One or two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. Entrance is by successful audition, held the first week of classes every semester; contact the instructor for information. The ensemble is also available without credit.

Corequisite(s): MUSI 215

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 218 - Marching Pride**

The Marching Pride performs during the half time at football games, both home and away, and for other special events. Much of its music is specially arranged. Open to all students. Six hours a week rehearsal during the football season. One to six credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 6 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-6

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 219 - Concert Band**

The Concert Band members are carefully selected to provide a balanced instrumentation of the best players. Music written for concert band is the main repertoire. Concerts on campus. Four hours a week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 5 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 220 - Jazz Ensemble**

The SRU Jazz Ensemble performs jazz literature from all eras of jazz history including big band, bop, hard bop, fusion and contemporary. This ensemble often performs with guest artists of national and international stature, both on and off campus. Membership in this ensemble requires an audition. Three hours and forty-five minutes of rehearsal per week. One to three credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 221 - Symphony Orchestra**

Symphony Orchestra is an ensemble of musicians chosen by audition which performs a selection of diverse orchestral repertoire from the Baroque period to the present. Rehearsals will be four hours a week. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 222 - Chamber String Ensemble**

The Chamber String Ensemble is a small ensemble selected for the study and performance of chamber music written for strings. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 223 - Brass Ensemble**

The university's Brass Ensemble is a select ensemble of brass (and percussion) players who study and perform music from all historical periods. Both large brass choir works and small chamber brass works are performed. The ensemble performs on and off campus. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 224 - Woodwind Ensemble**

The Woodwind Ensemble is a small select ensemble of woodwind players who study and perform music for woodwinds from all historical periods.

Three hours a week rehearsal time. One credit for every semester of satisfactory participation is granted for this music performance group, with a maximum allowance of ten credits in any one music organization. Additional credits are possible with a waiver from the departmental chairperson. The ensemble is also available without credit.

Credits: 1

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 225 - Percussion Ensemble**

This small select ensemble of percussionists studies and performs music composed and transcribed for both percussion and mallet ensembles.

Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 226 - Flute Choir**

The SRU Flute Choir is made up of a select group of flutists who will rehearse and perform a variety of music written for flute ensemble. Audition required. Two and a half hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 228 - Therapeutic Musical Strategies**

Designed to further prepare music majors in various therapeutic musical strategies (receptive and compositional techniques) through the application of functional music skills, group processes and leadership techniques appropriate for various clientele.

Prerequisites: MUSI 127 (may be taken concurrently)<sup>D</sup> and MUSI 137<sup>\*D</sup> and MUSI 138<sup>\*D</sup> and MUSI 199<sup>\*D</sup> (may be taken concurrently).

<sup>D</sup> Requires minimum grade of D.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms

**MUSI 229 - Clinical Integration**

A supervised clinical experience allowing the music therapy student practical experience in a variety of community health care agencies and educational settings.

Prerequisites: MUSI 127<sup>D</sup> and MUSI 137<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

**MUSI 230 - Clinical Integration**

A supervised clinical experience allowing the music therapy student practical experience in a variety of community health care agencies and educational settings.

Prerequisites: MUSI 228<sup>D</sup> and MUSI 229<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

**MUSI 233 - Chamber Music Performance**

A chamber music ensemble (of various instrumental and/or vocal combinations) which studies and performs music from many style periods. Two hours a week rehearsal time. Course may be repeated up to ten credits. Permission of the instructor.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course



**MUSI 234 - Class Piano III**

Continued development of skills acquired in Class Piano II to prepare music majors for piano proficiency exam, including sight-reading, transposition, playing by ear, technique and repertoire. Music majors only.

Prerequisite: MUSI 132<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

**MUSI 235 - Class Piano IV**

Continued development of skills acquired in Class Piano III to prepare music majors for piano proficiency exam, including sight-reading, transposition, playing by ear, technique and repertoire. Music majors only.

Prerequisite: MUSI 234<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

**MUSI 236 - Music Therapy Assessment, Measurement and Evaluation**

This course will present professional standards of music therapy practice including assessment, documentation, and evaluation; as well as techniques and application of behavioral observation and measurement in music therapy.

Prerequisites: MUSI 127<sup>D</sup> and MUSI 199<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

**MUSI 237 - Opera Performance**

Performance of scenes, arias, or full operas, taking into consideration the interest and skill of each student. Four hours of rehearsal per week; more rehearsal as needed in weeks leading to performance. One to four credits for every semester of satisfactory participation is granted for this music performance group. Additional repeats are possible with a waiver from the department chairperson. Each course number may be repeated up to five times.

Credits: 1-4

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 245 - Brass Methods**

A study of the fundamental concepts needed to play and teach beginning brass instruments (French horn, trumpet, trombone, baritone horn, tuba) both as soloists and in ensemble.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

**MUSI 247 - Percussion Methods**

A study of the fundamental concepts needed to play and teach beginning percussion instruments (pitched and non-pitched).

Credits: 1-2

Term(s) Typically Offered: Offered Fall Terms

**MUSI 253 - Music Theory and Analysis II**

This course is a continuation of Music Theory and Analysis I. The student will study musical literature written between 600-1750 through composition, analysis, aural discrimination, diatonic harmony, modal counterpoint, and performance. Three class meetings each week.

Prerequisite: MUSI 151<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

**MUSI 254 - Music Theory and Analysis III**

This course is a continuation of the Music Theory and Analysis I and II semesters in which the student will study the musical literature of the years 1750-1900 through the means of chromatic harmony, analysis, score reading, aural discrimination, composition and performance. Three class meetings each week.

Prerequisite: MUSI 253<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms

**MUSI 255 - Music Theory and Analysis IV**

This course is a continuation of the Music Theory and Analysis I, II and III sequence. Musical literature of the 20th century will be approached through analysis, listening, score reading, composition and performance. Three class meetings per week.

Prerequisite: MUSI 254<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

**MUSI 256 - Musicianship Skills II**

Students will build on the aural and rhythmic exercises established in Musicianship I through higher level rhythm reading, sight-singing, intervals and pattern recognition, simple, compound, and mixed meters, and harmonic progressions.

Prerequisites: MUSI 154<sup>C</sup> and MUSI 253<sup>\*C</sup> (may be taken concurrently).

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

**MUSI 257 - Musicianship Skills III**

Students will build on the skills established in Musicianship II by working on advanced aural and rhythmic exercises through rhythm reading, sight-singing, intervals and pattern recognition, simple, compound, and mixed meters, and harmonic progressions.

Prerequisites: MUSI 256<sup>C</sup> and MUSI 254<sup>\*C</sup> (may be taken concurrently).

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

**MUSI 258 - Musicianship Skills IV**

Students will build on the skills established in Musicianship III by working on more complex and advanced aural and rhythmic exercises through rhythm reading, sight-singing, intervals and pattern recognition, simple, compound, and mixed meters, and harmonic progressions.

Prerequisites: MUSI 257<sup>C</sup> and MUSI 255<sup>\*C</sup> (may be taken concurrently).

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

**MUSI 265 - Applied Performance Voice**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 165, 265, 365 may each be taken two times for a total of 18 credits; MUSI 465 may be taken four times for a total of 12 credits.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms  
Enrollment limited to students with department of Music.

**MUSI 266 - Applied Performance Piano**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 166, 266, 366 may each be taken two times for a total of 18 credits; MUSI 466 may be taken four times for a total of 12 credits.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms  
Enrollment limited to students with department of Music.

**MUSI 267 - Applied Performance Strings**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 167, 267, 367 may each be taken two times for a total of 18 credits; MUSI 467 may be taken four times for a total of 12 credits.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms  
Enrollment limited to students with department of Music.

**MUSI 268 - Applied Performance**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 168, 268, 368 may be taken two times for a total of 18 credits; MUSI 468 may be taken four times for a total of 12 credits.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms  
Enrollment limited to students with department of Music.

**MUSI 269 - Applied Performance Brass**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 169, 269, 369 may each be taken two times for a total of 18 credits; MUSI 469 may be taken four times for a total of 12 credits.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms  
Enrollment limited to students with department of Music.

**MUSI 270 - Applied Performance Percussion**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 170, 270 and 370 may each be taken two times for a total of 18 credits; MUSI 470 may be taken four times for a total of 12 credits.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms  
Enrollment limited to students with department of Music.

**MUSI 275 - Keyboard Music**

This course will examine the music literature for western keyboard instruments using live and recorded performances.

Credits: 3

**MUSI 276 - Songs & Singers**

This course will examine music literature for voice. Areas of consideration include solo songs, opera, oratorios, and vocal chamber music.

Credits: 3

**MUSI 278 - Literature of the American Musical Theater**

A study of the changing styles in the musical theater from 1860 to current Broadway musicals, rock operas, and operetta. Study conducted through the use of recordings, scores and participation.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**MUSI 279 - Applied Piano**

With the approval of the applied music teacher, lessons are available in piano. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms  
Enrollment limited to students with department of Music.

**MUSI 281 - Applied Voice**

With the approval of the applied music teacher, lessons are available in standard voice. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms  
Enrollment limited to students with department of Music.

**MUSI 282 - Applied Strings**

With the approval of the applied music teacher, lessons are available in string instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms  
Enrollment limited to students with department of Music.

**MUSI 283 - Applied Brass**

With the approval of the applied music teacher, lessons are available in standard brass instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms  
Enrollment limited to students with department of Music.

**MUSI 284 - Applied Woodwinds**

With the approval of the applied music teacher, lessons are available in standard woodwind instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms  
Enrollment limited to students with department of Music.

**MUSI 285 - Applied Percussion**

With the approval of the applied music teacher, lessons are available in standard percussion instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms  
Enrollment limited to students with department of Music.

**MUSI 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MUSI 291 - Field Experience in Music 2: Pre-K Experience**

In this course, students will complete Field Experience Level 2: Exploration by observing and assisting in a pre-K music class taught by a certified music educator with teaching experience with pre-K students.

Prerequisite: MUSI 111<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms  
Enrollment is limited to students with a program in Music Education (K-12), Music Education or Music Ed: Early Childhood.  
Enrollment limited to students in the College of Liberal Arts college.

**MUSI 292 - Tuba-Euphonium Ensemble**

The SRU Tuba-Euphonium Ensemble is comprised of tuba and euphonium players who rehearse and perform a variety of music written for tuba-euphonium ensemble. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 293 - Jazz Lab Band**

The SRU Jazz Lab Band is a rehearsal ensemble that performs one concert per academic semester. The group does require an audition which takes place in the first week of the Fall semester. If openings occur in the Spring semester, the director will hold an audition for the open seats only. The ensemble rehearses big band literature from every stylistic period in jazz history. The focus of the course is on developing sight-reading, jazz performance practice and techniques, stylistic interpretation, foundational ensemble techniques, jazz band rehearsal techniques, and exposure to the literature, history, and composers of jazz music. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms  
Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 294 - World Percussion Ensemble**

The SRU World Percussion Ensemble rehearses and performs the percussion music of cultures outside of Western Europe and the United States, concentrating on, but not exclusive to, the Caribbean (Trinidad and Tobago, Cuba, The Dominican Republic, and Puerto Rico), Asia (Japan, India, and Korea), South America (Brazil), and West Africa. Students learn the instruments, techniques, some choreography (when appropriate), and musical styles in multiple genres for at least one public performance each academic semester. The ensemble rehearses and performs on authentic instruments (whenever possible) or modern, commercially available substitutes. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms  
Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**MUSI 296 - Winter Guard**

The Slippery Rock University Winter Guard is the indoor color guard performing ensemble. In this performing ensemble, students will combine the use of flags, sabers, mock rifles, and other equipment, as well as dance and interpretive movement, in shows for public performance and competition. Held in the spring semester the group performs in competition as part of the indoor marching arts circuit as well as for campus and community events. The course may be repeated up to 5 times. Additional repeats are possible with a waiver from the department chairperson.

Credits: 1-2

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**MUSI 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**MUSI 299 - Diction for Singers**

In this study of language diction for singers, students will learn the International Phonetic Alphabet and apply it to the singing of English and Italian songs. The course is open to all voice majors.

Prerequisites: MUSI 133<sup>D</sup> or MUSI 181<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-2

Term(s) Typically Offered: Offered Fall Terms Even

**MUSI 300 - Marching Band Techniques**

Planning and preparation of half time shows using computer assisted design software and the "corps style" approach. Leadership skills, marching band pedagogy, and hand charting techniques will also be studied.

Prerequisite: MUSI 118 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 301 - Women and Music**

Explores the musical contributions of women, a group often excluded from studies of music history, from the Middle Ages to the present. Emphasis will be placed on the changing roles of and attitudes towards women as composers, performers, teachers, writers, patrons, and instrument-builders. Focus will be on the music itself, as well as reception history and historical and sociological context. There will also be discussion on the role of gender in shaping musical ideology and experiences.

Prerequisite: MUSI 101<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 304 - Orchestral String Methods**

A study of the fundamental concepts needed to play and teach beginning orchestral string instruments. No previous experience required. Instruments are provided by the university.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 309 - Jazz Combo**

Students will meet weekly with the appropriate faculty member to work on jazz performance in the small group (combo) setting. Study of phrasing, articulation, jazz theory, improvisation, and other jazz performance practices will be addressed. Students will be auditioned at the beginning of the semester for placement. At least one public performance will be given per semester. One hour of rehearsal time per week. One credit for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 312 - Music Therapy for Children**

Application of music therapy techniques and materials in all areas of mental health and special education.

Prerequisites: MUSI 236<sup>D</sup> and (SPED 121<sup>D</sup> or SPED 122<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 313 - Saxophone Quartet**

Students will meet weekly with the appropriate faculty member to work on literature selected for their performance ability level. Study of phrasing, articulation, balance, blend, intonation, and other performance practices will be addressed. Students will be auditioned at the beginning of the semester for placement. At least one public performance will be given per semester. Two hours per week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 314 - Symphonic Wind Ensemble**

Symphonic Wind Ensemble: A chamber ensemble composed of select musicians chosen by audition, performing contemporary literature as well as transcriptions for winds and percussion. Four and a half hours of week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 315 - Concert Choir**

Auditioned mixed chorus of 50-70 singers that studies and performs a variety of music from Renaissance to 21st century, classical to contemporary, a cappella and music accompanied by piano, chamber groups, and symphonic ensembles. Three hours per week rehearsal time. Multiple concerts are presented both on and off campus and on periodic tours. One to three credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. Entrance is by successful audition, held the first week of classes every semester; contact the instructor for information. The ensemble is also available without credit.

Credits: 1-3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 316 - University Chorus**

University Chorus is a non-auditioned ensemble open to singers from any academic discipline. This ensemble explores the fundamentals of singing and artistry within a collaborative community and through a selection of diverse repertoire. University Chorus has two ensembles that focus on higher voices and lower voices. Each semester, both sections will combine for mixed-voiced instruction on selected repertoire. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 317 - Chamber Singers**

An elite chamber choir of 16-24 outstanding singers who perform challenging repertoire with a greater emphasis on a cappella music. Members of this group are expected to display initiative to prepare music to the highest possible level of their ability. Two and one-half hours per week rehearsal time. One or two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. Entrance is by successful audition, held the first week of classes every semester; contact the instructor for information. The ensemble is also available without credit.

Corequisite(s): MUSI 315

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 318 - Marching Pride**

The Marching Pride performs during the half time at football games, both home and away, and for other special events. Much of its music is specially arranged. Open to all students. Six hours a week rehearsal during the football season. One to six credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 6 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-6

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**MUSI 319 - Concert Band**

The Concert Band members are carefully selected to provide a balanced instrumentation of the best players. Music written for concert band is the main repertoire. Concerts on campus. Four hours a week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 5 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 320 - Jazz Ensemble**

The SRU Jazz Ensemble performs jazz literature from all eras of jazz history including big band, bop, hard bop, fusion and contemporary. This ensemble often performs with guest artists of national and international stature, both on and off campus. Membership in this ensemble requires an audition. Three hours and forty-five minutes of rehearsal per week. One to three credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 321 - Symphony Orchestra**

Symphony Orchestra is an ensemble of musicians chosen by audition which performs a selection of diverse orchestral repertoire from the Baroque period to the present. Rehearsals will be four hours a week. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 322 - Chamber String Ensemble**

The Chamber String Ensemble is a small ensemble selected for the study and performance of chamber music written for strings. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 323 - Brass Ensemble**

The university's Brass Ensemble is a select ensemble of brass (and percussion) players who study and perform music from all historical periods. Both large brass choir works and small chamber brass works are performed. The ensemble performs on and off campus. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 324 - Woodwind Ensemble**

The Woodwind Ensemble is a small select ensemble of woodwind players who study and perform music for woodwinds from all historical periods. Three hours a week rehearsal time. One credit for every semester of satisfactory participation is granted for this music performance group, with a maximum allowance of ten credits in any one music organization. Additional credits are possible with a waiver from the departmental chairperson. The ensemble is also available without credit.

Credits: 1

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 325 - Percussion Ensemble**

This small select ensemble of percussionists studies and performs music composed and transcribed for both percussion and mallet ensembles. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 326 - Flute Choir**

The SRU Flute Choir is made up of a select group of flutists who will rehearse and perform a variety of music written for flute ensemble. Audition required. Two and a half hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 327 - Psychology of Music**

This course combines the study of 1) a survey and analysis of music therapy research in order to provide a foundation for developing skills in formulating a research question, reviewing the literature, designing a study, examining ethical questions related to research, analyzing data and writing reports; and 2) psychological and physiological foundations of musical behavior.

Prerequisites: (PSYC 105<sup>C</sup> or PSYC 100<sup>C</sup>) and MUSI 236<sup>D</sup>

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 329 - Clinical Integration**

A supervised clinical experience allowing the music therapy student practical experience in a variety of community health care agencies and educational settings.

Prerequisite: MUSI 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 330 - Clinical Integration**

A supervised clinical experience allowing the music therapy student practical experience community health care agencies and educational settings.

Prerequisite: MUSI 329<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 332 - Vocal Conducting**

This course is designed to give the student a practical knowledge of choral conducting techniques and a theoretical understanding of the Vocal Ensemble and its function from auditions through performance.

Prerequisites: MUSI 133<sup>D</sup> and MUSI 151<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 333 - Instrumental Conducting**

The practical aspects of learning to conduct the instrumental ensemble. Students will focus on developing expressive gestures to enhance the basic techniques. Score study, acoustical properties of the instruments, ensemble precision, balance and intonation will be addressed.

Prerequisite: MUSI 151<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 334 - Vocal & Choral Methods**

The course is designed to prepare the student to teach elementary and secondary vocal and choral music, including choosing appropriate teaching materials, incorporating relevant technology, sequencing and differentiating instruction, integrating and applying national and state standards for music education, supervising a music program, and becoming aware of professional organizations, workshops, and conferences.

Prerequisite: MUSI 206<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 335 - Early Childhood, Elementary, and Secondary General Music Methods**

A music education course designed to prepare the music education major to teach general music to students in grades preK-12 through the study of appropriate musical literature, methodologies, and materials.

Prerequisite: MUSI 258<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 336 - Instrumental Methods**

Instrumental methods is a music education course designed to prepare the student for a career in elementary and secondary instrumental music, including selecting appropriate literature, repair of instruments, public relations, incorporating relevant technology, sequencing and differentiating instruction, integrating and applying national and state standards for music education, and rehearsal techniques.

Prerequisites: MUSI 129<sup>C</sup> and MUSI 140<sup>C</sup> and MUSI 206<sup>C</sup> and MUSI 208<sup>C</sup> and MUSI 247<sup>C</sup> and MUSI 304<sup>C</sup> and MUSI 376<sup>C</sup> and MUSI 377<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 337 - Instrumental Rehearsal Techniques**

In this course for music education majors, students will analyze and conduct beginning and intermediate musical scores for concert band and orchestra. The student conductor will identify performance errors and learn specific rehearsal techniques to improve the ensemble's performance. Students must register for MUSI 339 concurrently with this course to complete field experience in the public schools as part of the requirements of this course.

Prerequisites: MUSI 129<sup>C</sup> and MUSI 140<sup>C</sup> and MUSI 206<sup>C</sup> and MUSI 208<sup>C</sup> and MUSI 247<sup>C</sup> and MUSI 304<sup>C</sup> and MUSI 376<sup>C</sup> and MUSI 377<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 339 - Rehearsal Techniques Field Experience**

In this course, students will complete field experience with a focus on ensemble rehearsals in the public schools, supervised by university faculty who are certified music educators.

Prerequisites: MUSI 245<sup>D</sup> and MUSI 206<sup>D</sup> and MUSI 247<sup>D</sup> and MUSI 304<sup>D</sup> and MUSI 374<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY or MUSIC UPPER DIV REVIEW STATUS attributes.

Enrollment limited to students with department of Music.

**MUSI 350 - Computer Technology in Music**

This course will introduce students to the technologies that are prevalent in the music and arts world today. Students will study the history of music and technology and work with today's computer music technologies such as, DC-Rom and MIDI, as well as creating software through the use of the program Hypercard.

Prerequisite: MUSI 255<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 351 - Arranging & Orchestration**

This course covers the basic concepts of arranging relative to instrumental and vocal groups. Emphasis is placed on the making of arrangements in addition to the transcription of composition.

Prerequisite: MUSI 255<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 352 - Music Technology**

This course will cover the basic techniques, operation and creative use of recording equipment, electronic music equipment, and computer equipment through practical experience in the Department of Music's recording studio, electronic music studio, and computer music laboratory. Application of music technology in music education, composition, performance, and studio work will be addressed.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 353 - Music Methods Block Field Experience**

In this course, students will complete at least 50 hours of field experience in the K-12 schools, with a focus on elementary vocal/general or instrumental music, supervised by university faculty who are certified music educators.

Prerequisites: MUSI 129<sup>C</sup> and MUSI 140<sup>C</sup> and MUSI 206<sup>C</sup> and MUSI 207<sup>C</sup> and MUSI 208<sup>C</sup> and MUSI 247<sup>C</sup> and MUSI 258<sup>C</sup> and MUSI 304<sup>C</sup> and MUSI 375<sup>C</sup> and MUSI 376<sup>C</sup> and MUSI 377<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Corequisite(s): MUSI 334, MUSI 335, MUSI 336 and MUSI 354

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY or MUSIC UPPER DIV REVIEW STATUS attributes.

Enrollment limited to students with department of Music.

**MUSI 354 - Integrated Music Methods Lab**

A combined course designed to integrate general music, choral, and instrumental methods principles and lab teaching experiences for students in the Music Methods Block. Prerequisite: Admission to Teacher Candidacy Required

Corequisite(s): MUSI 334, MUSI 335, MUSI 336 and MUSI 353

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY or MUSIC UPPER DIV REVIEW STATUS attributes.

Enrollment limited to students in the College of Liberal Arts college.

Enrollment limited to students with department of Music.

**MUSI 357 - Music Education for Diverse Learners**

This course provides an introduction to music education approaches and instructional foundations as well as the application of historical and instructional foundations of music with diverse learners. Major topics and developments in the field of special education, important terminology, curricular issues, and diversity, equity, and inclusion are explored. Students will learn about the characteristics of students with specific needs, the educational effects of these needs, appropriate adaptations, as well as music education approaches with diverse learners. Graduate students will analyze research applicable to music education for the diverse learner and apply it to the music education setting.

Prerequisite: SPED 121<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 359 - History of Music I**

A survey of musical styles from the ages of classical Greece and Rome through the Baroque period. Important composers and their literature will be discussed in relation to artistic, social, political, and economic conditions of their period. A reading knowledge of music is essential.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 360 - Keyboard Improvisation**

Melody harmonization and improvisation at the keyboard in 20th century popular and jazz styles. One class meeting and one laboratory session each week.

Prerequisite: MUSI 235<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 361 - Instrumental Improvisation**

This course teaches the basic concepts of improvisation, chord notation and chord styles in popular and jazz music scales. Open to all instrumentalists.

Prerequisite: MUSI 254<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 365 - Applied Performance Voice**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 165, 265, 365 may each be taken two times for a total of 18 credits; MUSI 465 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 366 - Applied Performance Piano**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 166, 266, 366 may each be taken two times for a total of 18 credits; MUSI 466 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 367 - Applied Performance Strings**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 167, 267, 367 may each be taken two times for a total of 18 credits; MUSI 467 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 368 - Applied Performance**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 168, 268, 368 may be taken two times for a total of 18 credits; MUSI 468 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 369 - Applied Performance Brass**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 169, 269, 369 may each be taken two times for a total of 18 credits; MUSI 469 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 370 - Applied Performance**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 170, 270 and 370 may each be taken two times for a total of 18 credits; MUSI 470 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 373 - History of Music II**

This course examines the music and culture from the period of the Rococo to the present. Lectures, readings, performances and listening sessions develop the student's musical understanding of the period. A reading knowledge of music is essential.

Prerequisite: MUSI 151<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 374 - Woodwind Methods**

A study of the fundamental concepts needed to play and teach beginning instruments of the woodwind family and the factors peculiar to each instrument (flute, oboe, clarinet, bassoon and saxophone). Students must register for MUSI 375 concurrently with this course to complete field experience in the public schools as part of the requirements of this course.

Corequisite(s): MUSI 375

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**MUSI 375 - Woodwind Methods Field Experience**

In this course, students will complete field experience with a focus on teaching individual and/or group instrumental lessons in the public schools, supervised by university faculty who are certified music educators. Acceptance into Teacher Candidacy.

Corequisite(s): MUSI 374

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY or MUSIC UPPER DIV REVIEW STATUS attributes.

Enrollment limited to students with department of Music.

**MUSI 376 - Flute, Oboe, & Bassoon Methods**

A study of the fundamental concepts and skills needed to play and teach flute, oboe, and bassoon to homogeneous and heterogeneous instrument groups in pre-K-12 instrumental music education setting. This includes the integration and application of national and state standards for music education. Pre-requisites: Admission to Teacher Candidacy required

Credits: 2

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students in the College of Liberal Arts college.

Enrollment limited to students with department of Music.

**MUSI 377 - High Brass Methods**

A study of the fundamental concepts and skills needed to play and teach trumpet and French horn to homogeneous and heterogeneous instrument groups in pre-K-12 instrumental music education setting. This includes the integration and application of national and state standards for music education.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students in the College of Liberal Arts college.

Enrollment limited to students with department of Music.



**MUSI 379 - Applied Piano**

With the approval of the applied music teacher, lessons are available in standard piano. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 381 - Applied Voice**

With the approval of the applied music teacher, lessons are available in standard voice. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 382 - Applied Strings**

With the approval of the applied music teacher, lessons are available in standard string instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 383 - Applied Brass**

With the approval of the applied music teacher, lessons are available in standard brass instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 384 - Applied Woodwinds**

With the approval of the applied music teacher, lessons are available in standard woodwind instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 385 - Applied Percussion**

With the approval of the applied music teacher, lessons are available in standard percussion instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 387 - Applied Counterpoint I**

This study and practice of writing music according to contrapuntal theory of the 16th century. Course may be repeated for up to 3 credits.

Prerequisite: MUSI 255<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 388 - Applied Counterpoint II**

The study and practice of writing music according to contrapuntal theory of the 18th century. Course may be repeated for up to 3 credits.

Prerequisite: MUSI 255<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 389 - Applied Composition**

Compositional techniques relative to the student's interest will be studied through an analysis of works by major composers. Although no definite idiom is prescribed, contemporary techniques are encouraged. May be repeated for up to three credits.

Prerequisite: MUSI 255<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 391 - Applied Electronic Composition**

A course designed to present the elements involved in electronic composition. The student will compose using magnetic tape, computer, and synthesizer. Course may be repeated for up to 3 credits.

Prerequisites: MUSI 255<sup>D</sup> or MUSI 352<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 392 - Tuba-Euphonium Ensemble**

The SRU Tuba-Euphonium Ensemble is comprised of tuba and euphonium players who rehearse and perform a variety of music written for tuba-euphonium ensemble. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 393 - Jazz Lab Band**

The SRU Jazz Lab Band is a rehearsal ensemble that performs one concert per academic semester. The group does require an audition which takes place in the first week of the Fall semester. If openings occur in the Spring semester, the director will hold an audition for the open seats only. The ensemble rehearses big band literature from every stylistic period in jazz history. The focus of the course is on developing sight-reading, jazz performance practice and techniques, stylistic interpretation, foundational ensemble techniques, jazz band rehearsal techniques, and exposure to the literature, history, and composers of jazz music. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 394 - World Percussion Ensemble**

The SRU World Percussion Ensemble rehearses and performs the percussion music of cultures outside of Western Europe and the United States, concentrating on, but not exclusive to, the Caribbean (Trinidad and Tobago, Cuba, The Dominican Republic, and Puerto Rico), Asia (Japan, India, and Korea), South America (Brazil), and West Africa. Students learn the instruments, techniques, some choreography (when appropriate), and musical styles in multiple genres for at least one public performance each academic semester. The ensemble rehearses and performs on authentic instruments (whenever possible) or modern, commercially available substitutes. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 396 - Winter Guard**

The Slippery Rock University Winter Guard is the indoor color guard performing ensemble. In this performing ensemble, students will combine the use of flags, sabers, mock rifles, and other equipment, as well as dance and interpretive movement, in shows for public performance and competition. Held in the spring semester the group performs in competition as part of the indoor marching arts circuit as well as for campus and community events. The course may be repeated up to 5 times. Additional repeats are possible with a waiver from the department chairperson.

Credits: 1-2

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 399 - Diction for Singers II**

In this study of language diction for singers, students will continue the study of the International Phonetic Alphabet and apply it to the singing of German and French art songs. The course is open to all voice majors.

Credits: 1-2

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Music, Music - Voice, Music Education (K-12), Music Educ-Voice (K-12), Music Performance, Music Performance-Voice, Music Therapy or Music Therapy-Voice.

**MUSI 402 - Teaching General Music Through Distance Education**

This course is designed to provide students with the knowledge and skills necessary to effectively teach general music through distance or cyber education.

Prerequisites: PE 411<sup>C</sup> and PE 421<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**MUSI 403 - Teaching Music Performance Through Distance Education**

This course is designed to provide students with the knowledge and skills necessary to effectively teach music performance through distance or cyber education.

Prerequisites: PE 302<sup>C</sup> and PE 303<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**MUSI 404 - Field Experience Immersion in Music**

In this course, students will participate in field experience through observing, assisting and teaching while being immersed in the culture of a different population. Travel expenses, which may include lodging, airfare, meals and other expenses, will be required as part of this course. Admission to Teacher Candidacy required.

Credits: 1

Term(s) Typically Offered: Offered Winter Terms Even

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY or MUSIC UPPER DIV REVIEW STATUS attributes.

Enrollment limited to students with department of Music.

**MUSI 406 - Advanced Conducting**

In this course, students will develop advanced skills of conducting instrumental and vocal ensembles, including but not limited to: expanding technique beyond stationary focal point conducting to variable focal point conducting, developing gestural vocabulary guided by the Laban Method and developing advanced score study and analysis.

Prerequisite: MUSI 206<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 407 - Choral Rehearsal Techniques**

In this course for music education majors, students will analyze and conduct beginning and intermediate musical scores for choir. The student conductor will identify performance errors and learn to use various rehearsal techniques to improve the ensemble's performance. Students will also survey and learn performance practice for choral literature of all historical stylistic periods, and discuss numerous aspects of choral pedagogy, such as designing curriculum for and administering a choral program.

Prerequisites: MUSI 406<sup>C</sup> and (MUSI 115<sup>C</sup> or MUSI 215<sup>C</sup> or MUSI 315<sup>C</sup> or MUSI 415<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 408 - Professional Preparation for the Music Job Search**

In this class, which is designed for music majors, students will create a resume, cover letter, and a portfolio; will engage in interview practice; and will form strategies for approaching the job search. The course is intended to be taken by students who will be entering the job search soon.

Credits: 1

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1 or Senior 2.

Enrollment limited to students with department of Music.

**MUSI 409 - Jazz Combo**

Students will meet weekly with the appropriate faculty member to work on jazz performance in the small group (combo) setting. Study of phrasing, articulation, jazz theory, improvisation, and other jazz performance practices will be addressed. Students will be auditioned at the beginning of the semester for placement. At least one public performance will be given per semester. One hour of rehearsal time per week. One credit for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 413 - Saxophone Quartet**

Students will meet weekly with the appropriate faculty member to work on literature selected for their performance ability level. Study of phrasing, articulation, balance, blend, intonation, and other performance practices will be addressed. Students will be auditioned at the beginning of the semester for placement. At least one public performance will be given per semester. Two hours per week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 414 - Symphonic Wind Ensemble**

Symphonic Wind Ensemble: A chamber ensemble composed of select musicians chosen by audition, performing contemporary literature as well as transcriptions for winds and percussion. Four and a half hours of week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 415 - Concert Choir**

Auditioned mixed chorus of 50-70 singers that studies and performs a variety of music from Renaissance to 21st century, classical to contemporary, a cappella and music accompanied by piano, chamber groups, and symphonic ensembles. Three hours per week rehearsal time. Multiple concerts are presented both on and off campus and on periodic tours. One to three credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. Entrance is by successful audition, held the first week of classes every semester; contact the instructor for information. The ensemble is also available without credit.

Credits: 1-3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 416 - University Chorus**

University Chorus is a non-auditioned ensemble open to singers from any academic discipline. This ensemble explores the fundamentals of singing and artistry within a collaborative community and through a selection of diverse repertoire. University Chorus has two ensembles that focus on higher voices and lower voices. Each semester, both sections will combine for mixed-voiced instruction on selected repertoire. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 417 - Chamber Singers**

An elite chamber choir of 16-24 outstanding singers who perform challenging repertoire with a greater emphasis on a cappella music. Members of this group are expected to display initiative to prepare music to the highest possible level of their ability. Two and one-half hours per week rehearsal time. One or two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. Entrance is by successful audition, held the first week of classes every semester; contact the instructor for information. The ensemble is also available without credit.

Corequisite(s): MUSI 415

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 418 - Marching Pride**

The Marching Pride performs during the half time at football games, both home and away, and for other special events. Much of its music is specially arranged. Open to all students. Six hours a week rehearsal during the football season. One to six credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 6 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-6

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 419 - Concert Band**

The Concert Band members are carefully selected to provide a balanced instrumentation of the best players. Music written for concert band is the main repertoire. Concerts on campus. Four hours a week rehearsal time. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 5 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 420 - Jazz Ensemble**

The SRU Jazz Ensemble performs jazz literature from all eras of jazz history including big band, bop, hard bop, fusion and contemporary. This ensemble often performs with guest artists of national and international stature, both on and off campus. Membership in this ensemble requires an audition. Three hours and forty-five minutes of rehearsal per week. One to three credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 421 - Symphony Orchestra**

Symphony Orchestra is an ensemble of musicians chosen by audition which performs a selection of diverse orchestral repertoire from the Baroque period to the present. Rehearsals will be four hours a week. One to four credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-4

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 422 - Chamber String Ensemble**

The Chamber String Ensemble is a small ensemble selected for the study and performance of chamber music written for strings. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 423 - Brass Ensemble**

The university's Brass Ensemble is a select ensemble of brass (and percussion) players who study and perform music from all historical periods. Both large brass choir works and small chamber brass works are performed. The ensemble performs on and off campus. Two hours a week rehearsal time. One credit for every semester of satisfactory participation is granted for this music performance group, with a maximum allowance of ten credits in any one music organization. Additional credits are possible with a waiver from the departmental chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**MUSI 424 - Woodwind Ensemble**

The Woodwind Ensemble is a small select ensemble of woodwind players who study and perform music for woodwinds from all historical periods. Three hours a week rehearsal time. One credit for every semester of satisfactory participation is granted for this music performance group, with a maximum allowance of ten credits in any one music organization. Additional credits are possible with a waiver from the departmental chairperson. The ensemble is also available without credit.

Credits: 1

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**MUSI 425 - Percussion Ensemble**

This small select ensemble of percussionists studies and performs music composed and transcribed for both percussion and mallet ensembles. Two hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms  
Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**MUSI 426 - Flute Choir**

The SRU Flute Choir is made up of a select group of flutists who will rehearse and perform a variety of music written for flute ensemble. Audition required. Two and a half hours a week rehearsal time. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms  
Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 428 - Music Therapy Advanced Topics**

Seminar in professional ethics, disability studies, race theory, and feminism.

Prerequisites: MUSI 327<sup>D</sup> and MUSI 330<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Music, Music Education (K-12), Music Performance or Music Therapy.

**MUSI 431 - Pedagogy**

Acquaintance with the philosophy, theories, techniques, materials, and practical applications of teaching applied music on the student's major instrument of study. Laboratory experience under the supervision of the instructor will be an integral part of the course.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 432 - Clinical Integration**

A supervised clinical experience allowing the music therapy student practical experience in a variety of community health care agencies and educational settings.

Prerequisite: MUSI 330<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 433 - Clinical Integration**

A supervised clinical experience allowing the music therapy student practical experience in a variety of community health care agencies and educational settings.

Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 437 - Opera Performance**

Performance of scenes, arias, or full operas, taking into consideration the interest and skill of each student. Four hours of rehearsal per week; more rehearsal as needed in weeks leading to performance. One to four credits for every semester of satisfactory participation is granted for this music performance group. Additional repeats are possible with a waiver from the department chairperson. Each course number may be repeated up to five times.

Credits: 1-4

Term(s) Typically Offered: Offered Fall & Spring Terms  
Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 440 - Music Therapy for Adult Clients**

Application of music therapy techniques and materials in all areas of mental health, corrections, and special education. Emphasis is placed on adult populations and group dynamics.

Prerequisites: MUSI 312<sup>D</sup> and MUSI 432<sup>D</sup> and PSYC 276<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 450 - Music Therapy Internship**

A continuous six-month internship in an approved music therapy program under the direction of a Board Certified Music Therapist. Required of all candidates for graduation.

Prerequisites: MUSI 428<sup>D</sup> and MUSI 440<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students in the BM 5273 program.

**MUSI 455 - Student Teaching - Music**

Under the guidance of a cooperating teacher and university supervisor, students engage in two eight-week assignments on a full-time basis in specified school districts and attend scheduled seminars. Supervisors assign additional requirements.

Prerequisites: MUSI 334<sup>D</sup> and MUSI 335<sup>D</sup> and MUSI 336<sup>D</sup> and MUSI 337<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 12

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY or MUSIC UPPER DIV REVIEW STATUS attributes.

Enrollment limited to students with department of Music.

**MUSI 456 - Social Emotional Learning in Music Education**

This course will explore the unique position of music education in addressing the social emotional learning competencies of self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. Music, by its very nature, is both social and emotional. In this course, you will learn how to integrate the SEL competencies into music education to create an environment where great teaching enriches the lives of students through the fostering of their SEL skills right alongside their musical development.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 457 - Popular Music Pedagogy**

The purpose of this course is to develop student achievement through the exploration of a modern band ensemble. The course will introduce the skills necessary to perform on electric guitar, acoustic guitar, electric bass, keyboard, drums, vocals, and technology. With an emphasis on the music styles of the last 50 years, many of these will be discussed, demonstrated, and performed by the students. The course will also foster peer-to-peer development in the band setting while encouraging each band to perform cohesively as a single unit. Students in Popular Music Pedagogy will also be introduced to the art of composition and improvisation.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 458 - Diversity, Equity, and Inclusion in Wind Band Literature**

This course will focus on issues of diversity, equity, and inclusion in the wind band profession, particularly related to wind band repertoire and equitable programming practices. In this course, students will engage with first-hand accounts from underrepresented communities in the wind band profession contextualized against a brief history of the wind band and its repertoire. Students will identify and analyze historical systems and structures influencing repertoire development. Diverse works by diverse composers at a variety of grade levels will be studied as well as resources to immediately implement equitable programming practices in the classroom today.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 465 - Applied Performance Voice**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 165, 265, 365 may each be taken two times for a total of 18 credits; MUSI 465 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 466 - Applied Performance Piano**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 166, 266, 366 may each be taken two times for a total of 18 credits; MUSI 466 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 467 - Applied Performance Strings**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 167, 267, 367 may each be taken two times for a total of 18 credits; MUSI 467 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 468 - Applied Performance**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 168, 268, 368 may be taken two times for a total of 18 credits; MUSI 468 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 469 - Applied Performance Brass**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 169, 269, 369 may each be taken two times for a total of 18 credits; MUSI 469 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 470 - Applied Performance**

Applied lessons for the Bachelor of Music in Performance student. One lesson and 15 hours of practice each week are required for three credits. Applied lessons beyond degree requirements will be granted upon faculty availability. MUSI 170, 270 and 370 may each be taken two times for a total of 18 credits; MUSI 470 may be taken four times for a total of 12 credits.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 230<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 473 - History of Popular Musics**

This course examines the musical history of popular musics from 1900 to the present including styles such as jazz, blues, country, rock and roll, rhythm & blues, rap, hip-hop, and music of various cultures. An emphasis on understanding the cultural context of the composers and music will be provided throughout this course highlighting social and political influences on popular musics.

Prerequisites: (MUSI 101<sup>D</sup> or MUSI 130<sup>D</sup>) or MUSI 102<sup>D</sup> or MUSI 104<sup>D</sup> or MUSI 105<sup>D</sup> or MUSI 151<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 479 - Applied Piano**

With the approval of the applied music teacher, lessons are available in standard piano. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisite: minimum score of Y in 'Musicianship Health Competency' Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 481 - Applied Voice**

With the approval of the applied music teacher, lessons are available in standard voice. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 482 - Applied Strings**

With the approval of the applied music teacher, lessons are available in standard string instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 483 - Applied Brass**

With the approval of the applied music teacher, lessons are available in standard brass instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 484 - Applied Woodwinds**

With the approval of the applied music teacher, lessons are available in standard woodwind instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 485 - Applied Percussion**

With the approval of the applied music teacher, lessons are available in standard percussion instruments. Materials studied will depend on the students' background and ability. Normally one lesson and five hours of practice each week are required.

Prerequisites: minimum score of Y in 'Musicianship Health Competency' or MUSI 203<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Music.

**MUSI 487 - Applied Counterpoint I**

This study and practice of writing music according to contrapuntal theory of the 16th century. Course may be repeated for up to 3 credits.

Prerequisite: MUSI 255<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 488 - Applied Counterpoint II**

The study and practice of writing music according to contrapuntal theory of the 18th century. Course may be repeated for up to 3 credits.

Prerequisite: MUSI 255<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 489 - Applied Composition**

Compositional techniques relative to the student's interest will be studied through an analysis of works by major composers. Although no definite idiom is prescribed, contemporary techniques are encouraged. May be repeated for up to three credits.

Prerequisite: MUSI 255<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 490 - Independent Study**

Students have an opportunity to study selected areas in greater concentration under the direction of a music faculty. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 491 - Applied Electronic Composition**

A course designed to present the elements involved in electronic composition. The student will compose using magnetic tape, computer, and synthesizer. Course may be repeated for up to 3 credits.

Prerequisites: MUSI 255<sup>D</sup> or MUSI 352<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 492 - Tuba-Euphonium Ensemble**

The SRU Tuba-Euphonium Ensemble is comprised of tuba and euphonium players who rehearse and perform a variety of music written for tuba-euphonium ensemble. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 493 - Jazz Lab Band**

The SRU Jazz Lab Band is a rehearsal ensemble that performs one concert per academic semester. The group does require an audition which takes place in the first week of the Fall semester. If openings occur in the Spring semester, the director will hold an audition for the open seats only. The ensemble rehearses big band literature from every stylistic period in jazz history. The focus of the course is on developing sight-reading, jazz performance practice and techniques, stylistic interpretation, foundational ensemble techniques, jazz band rehearsal techniques, and exposure to the literature, history, and composers of jazz music. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 494 - World Percussion Ensemble**

The SRU World Percussion Ensemble rehearses and performs the percussion music of cultures outside of Western Europe and the United States, concentrating on, but not exclusive to, the Caribbean (Trinidad and Tobago, Cuba, The Dominican Republic, and Puerto Rico), Asia (Japan, India, and Korea), South America (Brazil), and West Africa. Students learn the instruments, techniques, some choreography (when appropriate), and musical styles in multiple genres for at least one public performance each academic semester. The ensemble rehearses and performs on authentic instruments (whenever possible) or modern, commercially available substitutes. This is open to all students regardless of major or area of emphasis. One to two credits for every semester of satisfactory participation is granted for this music performance group. The course may be repeated up to 10 times. Additional repeats are possible with a waiver from the department chairperson. The ensemble is also available without credit.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 496 - Winter Guard**

The Slippery Rock University Winter Guard is the indoor color guard performing ensemble. In this performing ensemble, students will combine the use of flags, sabers, mock rifles, and other equipment, as well as dance and interpretive movement, in shows for public performance and competition. Held in the spring semester the group performs in competition as part of the indoor marching arts circuit as well as for campus and community events. The course may be repeated up to 5 times. Additional repeats are possible with a waiver from the department chairperson.

Credits: 1-2

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course  
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**MUSI 499 - Applied Recital**

The purpose of this course is to give the performance majors an opportunity to perform a full recital on their major instrument. It will be taken in addition to study in the student's major applied area. Course may be repeated up to two credits.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Music Performance.

## Nursing (NURS)

**NURS 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.



**NURS 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

**NURS 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

**NURS 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

**NURS 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

**NURS 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

**NURS 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

**NURS 311 - Introduction to Health Care Informatics**

This course is designed to provide students with an opportunity to apply knowledge and skills from information science and computer science to the health care field. Emphasis will be on developing a basic understanding of how automation is used to manage information in healthcare. Topics covered include types of information systems used in healthcare, how to select and implement information systems, current developments in healthcare information systems, issues surrounding computers in health care. In this course the focus is on the computer as a tool for helping healthcare providers do their work.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Nursing.

**NURS 312 - Nursing in Transition**

Nursing 312 examines professional role socialization from a historic, contemporary, and futuristic view. It enables the student to develop communication and technology skills necessary for success in a collegiate nursing program.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing.

**NURS 322 - The Teaching-Learning Process in Nursing**

This course is designed for the registered nurse who desires greater knowledge and skill in assisting individuals, families, and groups to acquire health-related knowledge, skills, and values. The course provides opportunities from a conceptual and practical perspective to explore the dynamics that contribute to effective health education. Emphasis will be placed upon developing the nurses' abilities, confidence, and self-image as teachers.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing.

**NURS 327 - Group Process for Nursing**

Provides opportunities to develop leadership skills with groups for the purposes of maintaining, regaining or improving their levels of wellness. The focus is on the group as a system. Combined conceptual knowledge and practical skills needed to work effectively with health-related groups will be taught (3 credits theory)

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing.

**NURS 331 - Evidence Based Health Assessment and Promotion**

This course emphasizes the complete health assessment, the nursing process, and its relationship to the prevention and early detection of disease in clients across the life span. This course reinforces the processes of health assessment: interviewing, history-taking, and physical assessment. Dominant models, theories and perspectives are used to explain health behaviors in relation to evidence-based health promotion and health education strategies. Students are expected to correlate health assessment and promotion with current evidence. This course includes assignments with computer simulated standardized patients. Incorporated throughout the course is the importance of communication and collaboration across culturally diverse populations.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing.

**NURS 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

**NURS 395 - Workshop**

All academic departments list this workshop course. Please contact the individual department for more information. A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

**NURS 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

**NURS 406 - Politics and Policy Nursing**

This course is designed to enhance the student's understanding of health policy as it relates to professional nursing practice. Students will explore health care policy and the policy-making process at various levels of government, research the impact of special interest groups on policy, and learn effective strategies to interact with legislators as citizen lobbyists and/or members of professional nursing organizations.

Credits: 3

Term(s) Typically Offered: Offered Spring & Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Nursing.

**NURS 408 - Delivery of Nursing Care in a Managed Care Environment/Clinical**

This course prepares students to understand managed health care delivery systems and their impact of delivery and practice patterns with emphasis on the delivery of nursing care.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing.

**NURS 422 - Nursing Research & Evidence-Based Practice**

This course examines the fundamental concepts of nursing research and evidence-based practice (EBP). Students are prepared to become critical consumers of nursing research. Through the application of research evidence, students are provided the tools necessary to advance nursing practice and improve patient outcomes.

Prerequisites: NURS 311<sup>D</sup> and NURS 312<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing.

**NURS 426 - Community and Public Health Nursing**

In this course the focus is on the community as the client. Theories, models, and concepts from community and public health nursing are examined. A course project, the Community Assessment, provides students the opportunity to complete and analyze a community assessment.

Prerequisites: NURS 311<sup>D</sup> and NURS 312<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing.

**NURS 429 - Financial Management for Nursing Case Managers**

This course provides students with content related to current issues, tools (i.e. Excel spreadsheet), and regulation necessary to function as a nursing case manager.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing.

**NURS 430 - Leadership in Nursing and Healthcare Systems**

This course is designed to provide students with a working knowledge of concepts and processes of leadership theory and practice in nursing and healthcare systems. Students successfully completing this course will be able to identify the personal and situational factors affecting leadership performance and adapt their behavior to become more effective leaders.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

**NURS 432 - Practice Experience for Leadership and Management in Nursing**

As a practice experience, the student will apply concepts gleaned from previous courses and NURS 431 to enhance professional nursing practice. Nursing leadership and management theories will be applied within the practice environment by emphasizing planning, delivering, managing, and evaluating cost-effective quality care. This is a practice experience that requires completion of all 300 core nursing courses (NURS 311, 312, 327, 331) as prerequisites and NURS 431 as a co-requisite course.

Prerequisites: NURS 311<sup>C</sup> and NURS 312<sup>C</sup> and NURS 327<sup>C</sup> and NURS 331<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Corequisite(s): NURS 431

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Nursing.

**NURS 433 - Innovative Technology for Healthy Communities**

This course focuses on consumer health informatics and technology which explores how innovative technology can be used to improve individuals' health within various community settings. Topics include the mode of delivery of consumer health information such as Internet-based technology; shared access to individuals' private health information; quality of consumer health information via social media; and health and information literacy seeking behavior. Finally, various types of innovative technology used within the home environment or within a healthcare setting to support consumers within a home environment will be explored.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing.

**NURS 434 - Leadership and Management in Nursing with Practice Experience**

This course focuses on the theory for leadership and management roles, leadership theories, and the ethical decision-making process in the delivery of health care to diverse populations. The student will apply concepts from this course and gleaned from previous courses to enhance professional nursing practice in both the theoretical realm and the practice environment. Nursing leadership and management practices will be analyzed with an emphasis on planning, delivering, and evaluating cost-effective quality care. This is a course that requires completion of all 300 level core nursing courses (NURS 311, 312, 327, 331) as prerequisites.

Prerequisites: NURS 311<sup>C</sup> and NURS 312<sup>C</sup> and NURS 327<sup>C</sup> and NURS 331<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Nursing.

**NURS 440 - Nursing Case Management in Today's Healthcare Environment**

This course is designed to prepare students to understand the case management responsibilities which include planning, coordinating, and managing care of consumers within a health care system. Students will learn to use evidence-based pathways in making decisions, planning care and finding the best ways to deliver safe, quality and culturally appropriate care and controlling increasing health care costs. Identify innovative technologies to measure case management effectiveness and outcomes.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing.

**NURS 450 - Health Care Informatics Internship**

Provides opportunity to apply theory and develop competencies in health care informatics through a work-related experience in an appropriate health related enterprise.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

**NURS 451 - Internship in Correctional Nursing**

Provides opportunity to apply theory and develop competencies in correctional nursing through a work-related experience in an appropriate correctional institution.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

**NURS 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

**NURS 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

**NURS 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Nursing or Program PA School Nurse Certif.

## Parks & Conservation (PCRM)

**PCRM 104 - Foundations in Sustainability**

This course will provide a foundation of basic concepts associated with environmental and its associated cultural sustainability. Emphasis will be placed on the interdependence of our natural resources to achieve sustainability in a cultural context. Course development will move from individual environmental ethics and personal actions to civic responsibility and global perceptions.

Credits: 3

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

**PCRM 105 - Leisure-Centered Living**

The constructive use of leisure and education for leisure are essential tools for a person's successful growth and development. Leisure-centered living is designed to help students investigate, evaluate, and plan leisure/play as a basic human need and necessity for well-being.

Credits: 3

**PCRM 110 - Foundations of Parks and Outdoor Recreation**

This course is designed to provide the student with the conceptual foundations of outdoor recreation as it relates to park resources management, environmental education/interpretation, and outdoor leadership. The course examines the history and philosophy of outdoor recreation and where it fits in the broad field of leisure. Students will be introduced to the roles of government and the private sector in parks and outdoor recreation. In addition, an overview of national resources as well as the interaction of humans with our natural resources will be reviewed. Students will also explore career opportunities and identify needed skills of outdoor recreation professionals.

Credits: 3

**PCRM 111 - Introduction to Park and Resource Management**

This course is a sequel to Foundations of Parks and Recreation I and will continue to examine the historical and philosophical background of the leisure movement with regard to recreation organizations and services. Professional preparation in relation to perceived and actual needs concerning risk management, research and evaluation, information technology, ecological considerations and sustainable planning and management practices in the parks and recreation field will also be explored.

Credits: 3

**PCRM 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**PCRM 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

**PCRM 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

**PCRM 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

**PCRM 204 - Environmental Communication**

In this course, students will learn about the theoretical and applied concepts that guide the discipline of environmental communication including rhetoric & discourse, media, public participation, social marketing, collaboration & conflict resolution, risk communication, and popculture. Students will demonstrate understanding and show application of materials for successful environmental communication in a variety of protected areas and conservation settings.

Credits: 3

**PCRM 210 - Resources for Outdoor Programming**

The outdoors was the first classroom and many lessons are still taught in and for the outdoors. This course is designed to provide anyone working in a recreational or park setting with methods and materials to use to achieve a variety of educational and recreational goals. Emphasis will be placed on identifying and using existing instructional materials, in addition to developing personal materials and lessons for outdoor programming.

Credits: 3

**PCRM 211 - Outdoor Leadership**

This course is a study of the principles and practices essential for outdoor leaders with emphasis on the development of KSAs to lead groups into the wild outdoors.

Credits: 3

Thematic Thread(s): Institutions & Human Innovations, Transfer Thread Completion Course

**PCRM 214 - Parks and Recreation Planning**

This course provides a comprehensive introduction to the field of recreation planning. Class sessions will focus on a variety of planning approaches and tools, which are utilized throughout the field of recreation. Students will gain familiarity with these planning tools as they engage in an abbreviated campus-wide study focused on the availability of recreational resources to SRU students.

Prerequisites: PREE 110<sup>D</sup> or PCRM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

**PCRM 251 - Field Experience**

Opportunities for basic practical experience in a variety of park and recreation/environmental education settings. May be repeated up to 3 times.

Credits: 1

**PCRM 271 - Law Enforcement Firearms**

This course provides basic orientation to and qualification with the approved handgun and familiarization with the 12 gauge shotgun including safety and "shoot-no shoot situations.

Credits: 3

**PCRM 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

**PCRM 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

**PCRM 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

**PCRM 304 - Search and Rescue/Wilderness Medicine**

This course will provide basic and intermediate instruction in search and rescue techniques and emergency medical procedures in wilderness settings. Students will be introduced to the various evacuation and stabilization procedures that are commonly implemented in emergency situations.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 315 - Recreation Resource Planning and Analysis**

This course is designed specifically for student in the Park and Resource Management track. It is designed to provide the student with application of the planning process, from site and program analysis into planning recreational facilities. students will use a variety of planning tools and on-line analysis resources, as well as a variety of professional recreation planning frameworks.

Prerequisites: PREE 214<sup>D</sup> or PCRM 214<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 318 - Administrative Strategies for Resource Managers**

The organization and administration of parks and recreation services, including organizational management, personnel practices and labor relations, financial and business procedures and legal aspects.

Credits: 3

Enrollment limited to students with a semester level of Freshman 1, Freshman 2 or Sophomore 1.

**PCRM 342 - Group Facilitation and Leadership**

This course will cover the concepts related to working with groups as a facilitator. Hands-on approaches to program design, sequencing activities and processing experiences will be examined. Students will facilitate their classmates through a group development experience making use of SRU's low and high challenge courses and the Leadership Reaction Center.

Credits: 3

Thematic Thread(s): Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**PCRM 347 - Interpretive Methods and Programming**

A study of the principles and methods to interpret natural and cultural history in parks and other outdoor settings.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 348 - Natural History of Ecosystems I**

This course provides basic ecology and natural history information and skills for the purpose of environmental and resource management as well as interpretation and environmental education. Local animal identification, interactions of species with their environment, and species interactions are among the topics covered.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 349 - Natural History of Ecosystems II**

This field-oriented course is designed to integrate basic scientific inquiry and ecological field techniques to develop skills of analysis, synthesis and evaluation of scientific information for the purpose of environmental and resource management. Results of field investigations are applied to relevant ecological problems and management objectives for the purpose of environmental decision making. Topics include local plant and fungi identification, community ecology, ecosystem ecology, and ecological biogeography.

Prerequisites: PREE 260<sup>D</sup> or PREE 348<sup>D</sup> or PCRM 348<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 351 - Parks & Conservation Practicum**

Observation and participation in parks and recreation or environmental education activities. Cross listed as RCTH352.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 371 - Fundamentals of National Park Service Law Enforcement**

This course covers the legal and administrative fundamentals of National Park Service law enforcement including federal law and NPS policies and guidelines.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 372 - Visitor Services Management**

A study of visitor services including information, safety, rescue and law enforcement services.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 374 - Federal Law & Park Policy**

This course is designed to provide students with advanced knowledge of federal law, policies, and procedures. Students will develop an in-depth understanding of Federal policy for various land management agencies with emphasis on National Park Service policy. The course will also cover legal updates in park law enforcement.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 377 - Cultural Resources Management**

This course provides a comprehensive introduction to the management of cultural and historic resources. The course examines the goals, legislation, and methodologies related to cultural resources management, research and programming.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 405 - Social Ecological Systems**

This course uses a social-ecological systems framework in order to advance an interdisciplinary approach to conservation of biological diversity and natural resources. Students will be exposed to contemporary conservation and natural resource management challenges and will learn how those issues can be addressed through an integrated understanding of social and natural systems. Case studies will be presented and discussed in class in order to connect theoretical frameworks to on the ground conservation problems and to consider opposing and controversial viewpoints. Students will develop practical skills in understanding and discussing cross-cultural and interdisciplinary natural resource management issues.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**PCRM 415 - Challenges and Trends in Parks and Conservation**

An integrative course for detailed study of current issues in parks and recreation with emphasis on unique and imaginative solutions to the challenges facing the recreation/parks profession. Must be a senior to enroll.

Credits: 3

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

**PCRM 450 - Internship**

A supervised off-campus work experience in an appropriate aspect of parks and recreation or environmental education work. Open only to PCRT majors with advanced standing.

Credits: 1-12

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 471 - NPS Law Enforcement**

This course provides an overview of NPS law enforcement policies and procedures, relevant federal laws, Titles 36 and 50, CFR, and courtroom procedures.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 472 - Park Law Enforcement**

This course provides basic law enforcement skills essential for the park law enforcement ranger.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 475 - Park and Resource Management**

The principles and practices of recreational land and water management. Field trips required.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 477 - Wildlife & Wildlands Field Methods and Management**

Course will cover the application of natural history and ecological concepts as it related to parks, other public lands and environmental education. Emphasis is placed on project development, problem solving and critical thinking skills as they relate to resource management.

Prerequisites: (PREE 348<sup>D</sup> or PCRM 348<sup>D</sup>) and (PREE 349<sup>D</sup> or PCRM 349<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 490 - Independent Study**

A special study opportunity for students to investigate in-depth, approved topics in recreation or environmental studies. Topic and credit established by student and supervising instructor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 491 - Professional Seminar**

This course is designed to assist students in preparing for entry into the environmental education profession. Topics will include career planning, employment opportunities, employment seeking skills, and discussions centering on areas of interest to the student.

Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PCRM 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

**PCRM 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Parks & Recreation (PREE)

**PREE 411 - Tourism Planning and Operations**

This course studies the different components of travel, as well as the planning and operation of group/package tours and tourist attractions.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PREE 414 - Concepts and Trends in Travel and Tourism**

The course will focus on current concepts and trends of the travel and tourism industries both domestically and internationally.

Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

# Petroleum/Natural Gas Engineering (PNGE)

## PNGE 139 - Foundations of Academic Discovery

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

## PNGE 190 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## PNGE 195 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

## PNGE 198 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## PNGE 201 - Introduction to Petroleum and Natural Gas Engineering

This course provides an overview of different aspects of petroleum and natural gas engineering from generation to exploration of petroleum reservoirs to drilling and production from these resources.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

## PNGE 290 - Experimental

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## PNGE 295 - Workshop

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

## PNGE 298 - Selected Topics

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## PNGE 312 - Petrophysics

This course provides an in depth review of the properties of the reservoir rock and fluids. Topics covered will include theoretical and applied phase behavior of hydrocarbon systems and hydrocarbon fluid properties, basic properties of petroleum reservoir rocks and laboratory evaluation of basic and special petroleum reservoir rock and fluid properties.

Prerequisites: CHEM 107<sup>D</sup> and CHEM 111<sup>D</sup> and PNGE 201<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## PNGE 315 - Reservoir Fluids

Thermodynamic behavior of naturally occurring hydrocarbon mixtures; evaluation and correlation of physical properties of petroleum reservoir fluids including laboratory and empirical methods.

Prerequisites: PNGE 312<sup>D</sup> and CHEM 108<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## PNGE 325 - Reservoir Engineering

This course provides an in depth review of reservoir characteristics and behavior. Topics covered will include fluid flow through porous materials, evaluation of oil and gas resources and the reserves under a variety of production methods, and prediction of reservoir performance to achieve maximum conservation.

Prerequisites: EGEO 327<sup>D</sup> and PNGE 315<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## PNGE 330 - Unconventional Reservoir Engineering

This course addresses topics that are specific to exploration of unconventional reservoirs - identification and characterization, economics, efficient completion technologies and development strategies. Tight gas and shale gas reservoirs and coal bed methane engineering are addressed.

Prerequisite: PNGE 325<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 410 - Drilling engineering with Lab**

This course provides an in depth review of drilling engineering practices. Topics covered will include functions and design considerations for the rotating system, hoisting system and circulating system; drilling fluids calculations and selections; hydraulic programs; drilling optimization; casing string design; cementing programs; and pressure control; laboratory evaluation of mud weight control filtration, chemical contaminants and rheological models.

Prerequisites: ENGR 301 (may be taken concurrently)<sup>D</sup> and PNGE 312<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 420 - Production Engineering**

This course provides an in depth review of petroleum production engineering practices. Topics covered will include well completion, performance of productive formations, drill stem tests, completion of wells, flowing wells, gas lift methods and equipment, pumping installation design, well stimulation, emulsion, treating, gathering and storage of oil and gas, field automation.

Prerequisites: PNGE 410 (may be taken concurrently)<sup>D</sup> and PNGE 325<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 430 - Reservoir Simulation**

Mathematical models governing fluid flow in reservoirs; relevant numerical methods; numerical reservoir simulations; treatment of wells; history matching; simulation project performed using a commercial simulator.

Prerequisites: CPSC 146<sup>D</sup> and (MATH 309<sup>D</sup> or MATH 232<sup>D</sup>)  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 432 - Formation Evaluation**

This course provides an in depth review of techniques for formation evaluation. Topics covered will include various well logging methods and related calculations with exercises in interpretation of data from actual well logs.

Prerequisite: PNGE 312<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 435 - Pressure Transient Analysis**

This course provides an in depth review of the well test analysis methods. Topics covered will include pressure transient tests and interpretation methods, unsteady-state fluid flow through porous rock, analysis of the drawdown and buildup tests, wellbore storage, application of pressure derivative in pressure transient data analysis, testing of hydraulically fractured wells, type curve method, testing of horizontal wells, unified method of analysis, well test design.

Prerequisite: PNGE 420<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 440 - Hydraulic Fracturing**

This course starts with a general overview of different types of unconventional reservoirs and their geological and petrophysical properties. Second part of the course emphasizes hydraulic fracturing design and data collection for proper fracture design. Economic analysis of hydraulic fracturing will be covered as well as more advanced topics such as completion design optimization.

Prerequisite: PNGE 325<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 441 - Oil and Natural Gas Resource Valuation and Economics**

This course provides an in depth review of the techniques for oil and gas property evaluation. Topics covered will include reserve estimation, decline analysis, petroleum property evaluation, interest calculations, cost estimation, and tax evaluation, investment decision analysis and computer applications in property evaluation.

Prerequisites: PNGE 325<sup>D</sup> and PNGE 432<sup>\*D</sup> (may be taken concurrently).

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 443 - Enhanced Oil Recovery**

This course teaches an integrated version of the basics of waterflooding and enhanced oil recovery (EOR), illustrating the connection of each process to a few fundamental principles. It reviews the specifics of thermal and solvent EOR by relating basic principles to the results of cases from the field.

Prerequisite: PNGE 325<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Petro & Natl Gas Engineering.

Enrollment limited to students in the College of Engineering & Science college.

**PNGE 445 - Natural Gas Engineering with Lab**

This course provides an in depth review of natural gas evaluation and production engineering practices. Topics covered will include natural gas properties, compression, transmission, processing and application of reservoir engineering principles to predict the performance and design of gas, gas-condensate and storage reservoirs. Includes a laboratory devoted to gas measurements.

Prerequisite: PNGE 325<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 450 - Internship**

Supervised placement and research in selected public and private agencies.

Credits: 3-9

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 459 - Petroleum and Natural Gas Design/Capstone I**

This course provides a proposal preparation for PNGE 460 which includes defining a comprehensive problem in design involving systems in oil and gas production, field processing, transportation, and storage.

Prerequisites: PNGE 325<sup>D</sup> and PNGE 410<sup>D</sup> and PNGE 420<sup>\*D</sup> and PNGE 432<sup>\*D</sup> (may be taken concurrently).

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 460 - Petroleum and Natural Gas Engineering Design/Capstone II**

This course provides comprehensive problems in design involving systems in oil and gas production, field processing, transportation and storage.

Prerequisite: PNGE 459<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 470 - Petroleum and Natural Gas Engineering Undergraduate Research**

Research and design problems of limited scope approved on an individual basis intended to promote independent inquiry.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**PNGE 490 - Independent Study**

Investigation of the theoretical or experimental area following a plan or proposal initiated by the student and approved by the major advisor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PNGE 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**PNGE 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Philanthropy, Nonprofit Leadership, and Public Administration (NLPA)

**NLPA 120 - Civic Engagement and Community Decision-Making**

An introduction to civic engagement in a democratic society with a focus on the complex nature of public policy making and the role each citizen plays in the formation and modification of socially just public policies. Students will gain introductory skills in civil voice, civil discourse, public policy analysis and community mobilizing for social good.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course

**NLPA 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**NLPA 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**NLPA 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**NLPA 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**NLPA 200 - Empowered to Serve**

Planning a career where you will help others? The interdisciplinary approach of this course introduces students to the historical, cultural and ethical context of service; investigates the increase in the number of helping professionals; takes students on a journey of personal empowerment; and offers theories and best practices that prepare them to empower the persons they will serve in their professions. Assigned readings, case studies, service-learning experiences, structured reflection and discussions empower students to understand and develop individual purpose, become lifelong learners, and combine knowledge, skills, values and motivation to make a difference in the lives of those they serve. This course would be especially useful for students seeking careers in helping professions such as animal care and protection, community and public service, counseling, education, health and wellness, human rights, legal and protective services, the military or social services.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Transfer Thread Completion Course

**NLPA 220 - Introduction to Nonprofit Management**

An introduction to the nonprofit sector; emphasis on leadership and decision-making in rapidly growing areas of health and human service, cultural, environmental, educational, charitable, and religious organizations.

Credits: 3

Term(s) Typically Offered: Offered Spring & Summer Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Transfer Thread Completion Course, United States in Global Context

**NLPA 230 - Introduction to Public Administration**

This interdisciplinary and global approach to public administration will explore the theories and best practices employed by public servants to promote the public good through ethical, culturally competent, and efficient and effective service provision. Through case studies and service-learning projects, students will be encouraged to consider a cross sector approach for implementing and evaluating policies and procedures that impact quality of life both domestically and globally. Students will develop a greater understanding of the role public servants have in their lives, develop skills employed by these professionals and explore public service career opportunities.

Credits: 3

Term(s) Typically Offered: Offerings Vary

**NLPA 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**NLPA 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**NLPA 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**NLPA 305 - Financial Best Practices for Decision Makers**

Emphasizes practical use of accounting information to support decision making by those in fields such as business, sports, resort management, government, education, and not-for-profit. Overview of financial and managerial accounting from a user's perspective, including use and analysis of financial statements, internal control, budget preparation, and cost and revenues behavior patterns. (For non-business majors)

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**NLPA 320 - Community Change and Development**

This course surveys the field of community development within the context of community collaboration and civic leadership. Topics include social capital, asset-based community development, sustainable community programs, economic development programs, private/public partnerships, and the shared role of the private, public, nonprofit sectors and everyday citizens in community development.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**NLPA 325 - Social and Ethical Issues in Philanthropy and Fundraising**

Resource development, including grant writing and social entrepreneurs, is increasingly important to the future of nonprofit and educational organizations. This course addresses methods for integrating resource development and income generation into an organization's life. Three themes are found in this course: resource development as a management function, resource development as a management process, and issues in resource development.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**NLPA 328 - Program Design and Evaluation in Nonprofit and Governmental Organizations**

Effective and efficient programs change lives! This course offers students the strategies and best practices for designing high quality programs, the tools and ethical framework to monitor program delivery, the qualitative and quantitative research skills essential for relevant evaluation and the necessary processes for program elimination, modification and scaling. Through case studies, service-learning projects and other hands-on assignments, students will be challenged to apply concepts to practice including the preparation of SMART objectives, logic models, project timelines, evaluation plans, program reports and recommendations for future programming.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**NLPA 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**NLPA 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**NLPA 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**NLPA 450 - Internship**

Supervised placement in selected professional agencies.

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**NLPA 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**NLPA 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**NLPA 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Philosophy (PHIL)

**PHIL 101 - Introduction to Philosophy**

A first encounter with the nature and methods of philosophical thinking in which a person's view of his/her own nature and of the world becomes challenged, explored and deepened. Students read a diverse range of primary texts, both classical and contemporary, western and non-western. They may also view films and other media that present philosophical arguments.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

**PHIL 110 - Ethics and Civil Discourse**

An introduction to the practice of civil discourse through a philosophical study of ethics from theoretical and applied perspectives.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**PHIL 113 - Formal Logic**

An introduction to the standards and methods of inference utilized in formal systems of logic including traditional syllogistic logic and modern propositional logic. Phil 113 is designed to improve students' ability to recognize fallacies in reasoning, to identify and make valid inferences, and to construct sound arguments.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

**PHIL 123 - Ethics**

An introduction to the study of questions concerning right action, moral obligation, and an examination of various theories of moral judgment. This course introduces students to the many forms of inquiry and analysis conducted in the humanities, especially philosophy, and the perennial questions that philosophy addresses. Students engage a diverse range of primary texts in ethics and ethical theory, both classical and contemporary, western and non-western. They also view and analyze films and other media that present ethical arguments.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

**PHIL 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**PHIL 140 - World Religions**

This course is designed to be a survey of religious traditions from across the globe and an exploration of their philosophies and world views.

This course introduces students to the many forms of inquiry and analysis conducted in the humanities, especially religious studies and comparative religion. Students engage a range of primary and secondary texts to gain a comparative understanding of the world's religions.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

**PHIL 163 - Philosophy in Literature**

An examination of the philosophical content of poetry, prose, and film of exceptional literary and philosophical merit. This course introduces students to the many forms of inquiry and analysis conducted in the humanities, especially philosophy, and the perennial questions that philosophy addresses. Students engage a diverse range of literary texts, both classical and contemporary, western and non-western. They also view and analyze films and other media that present philosophical arguments.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**PHIL 170 - American Philosophy**

An investigation of the historical genesis of American culture through a reading of the prominent philosophical literature the culture has produced.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

**PHIL 171 - Philosophy of Human Existence**

An investigation into and discussion of the central themes of existential philosophy. Philosophers such as Kierkegaard and Nietzsche will be studied in terms of their retrieval of the meaning of human existence.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Thematic Thread(s): Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

**PHIL 180 - Philosophical Inquiry**

This course guides students through the method of philosophical inquiry by exploring philosophical problems and questions in the broader context of humanistic inquiry.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**PHIL 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PHIL 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**PHIL 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PHIL 261 - Philosophy of Art**

Exploration of basic issues and philosophical views of the experience of the arts. This course aims at the understanding and enhancement of the experience of the arts, and at a thoughtful appraisal of the role of art in life.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

**PHIL 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PHIL 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**PHIL 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PHIL 313 - Symbolic Logic**

An advanced investigation of logical thought through the use of special techniques of symbolization, the logic of unquantified and quantified propositions, the nature and limits of logical systems and the foundation of mathematics are some of the important topics considered.

Prerequisites: PHIL 113<sup>D</sup> or MATH 120<sup>D</sup> or MATH 199<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHIL 324 - Environmental Ethics**

An analysis of environmental issues using a philosophical understanding of nature, with a consideration of the ethical responsibilities in the use of the earth's resources, behavior toward non-human species, and obligations toward future generations.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHIL 325 - Medical/Health Care Ethics**

A course in applied ethics about conceptual, ethical, and legal dilemmas in the institutional rights of patients, in the responsibilities of practitioners, in technological challenges to values in the modern age in caring for the seriously ill and the dying, and in rationing health care in a large society.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHIL 326 - Business Ethics**

A study of applied ethics about the conceptual and ethical dilemmas in the business professions. An examination of cultural challenges of social and moral responsibility in a technically sophisticated economic climate.

Credits: 3

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHIL 331 - Social and Political Philosophy**

An in-depth study of central concepts and issues in social and political thought from multiple, diverse perspectives. Issues may include just and fair societies, theories of political obligation, and theories of citizenship and civic engagement with regard to diverse, heterogeneous communities.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Citizenship & Social Problems, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHIL 335 - Philosophy of Law and Justice**

A study of multiple theories of law and the nature of law's relation to justice with special emphasis on a notion of justice for institutions.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHIL 336 - Philosophy of Gender and Sex**

This course will examine concepts, values and assumptions relevant to gender and sex in our diverse society. Topics to be explored may include the ontological status of gender and sex; the cultural representations of masculinity, femininity and sexuality; or the relationship between gender, society and power, and its epistemological and ethical consequences.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHIL 338 - Ethics, Technology, and the Future**

This course considers ethical, sociopolitical, epistemological, and metaphysical issues arising from the design and use of emerging technologies, including information technologies, robots and autonomous machines, neurological and implantable technologies, genetic engineering, and artificial intelligence, as well as the more speculative technologies of science fiction.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

**PHIL 341 - Philosophy of Religion**

A critical inquiry into the nature and validity of religious belief and experience, its relation to other human interests, its diversity, and its contemporary significance.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHIL 343 - Asian Philosophy**

An investigation of the central religions and philosophical ideas of Oriental cultures, focusing primarily on the cultures of India, China, Japan and Southeast Asia.

Credits: 3

Thematic Thread(s): Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHIL 351 - Philosophy of Natural Science**

An in-depth examination of the nature of natural science, including its aims, methods, central concepts, and limits and a thoughtful appraisal of its significance for the modern age.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**PHIL 362 - Philosophy of Mind**

This course considers philosophical perspectives on the nature of mind and its relation to the world. Topics covered include the mind-body problem, the nature of consciousness, personal identity and the nature of the self, free will and moral responsibility, and the implications of technology for the future of human consciousness.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Thematic Thread(s): Conservation, Technology & Imagination, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHIL 371 - Ancient Western Philosophy**

A study of the major philosophers and schools of philosophy in the ancient Western world and their influence on the medieval period. The course examines basic questions and concepts in theory of knowledge, logic, ethics, politics, aesthetics, and metaphysics as found in the works of thinkers like Plato, Aristotle, the Presocratics, the Stoics, and the Epicureans. Students will consider how ancient philosophy continues to provide insight and inspiration in the contemporary world.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Thematic Thread(s): Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHIL 372 - Modern Western Philosophy**

A study of Western philosophy from the Renaissance through the Age of Enlightenment and into the early nineteenth century, this course traces the basic concepts and problems of the period, especially problems of knowledge, ethics, and metaphysics. Students will consider the contribution of modern philosophers to the Scientific Revolution and to the development of the scientific method, as well as how modern philosophy continues to provide insight and inspiration in the contemporary world.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Thematic Thread(s): Citizenship & Social Problems, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHIL 373 - Modern Authors and Issues**

Variable content within the modern contemporary period of philosophical thinking. Repeatable to 6 credits.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHIL 375 - Existentialism and Phenomenology**

A study of important twentieth century philosophers in terms of their attempt to establish a new approach to philosophy and their reaction and attempt to overcome Western metaphysics.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHIL 376 - Analytic Philosophy**

An examination of the development and influence of Anglo-American analytic philosophy in the twentieth century. The focus will be on how analytic philosophers have used logic, the analysis of language, and scientific methodology in approaching traditional philosophical questions.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHIL 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHIL 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHIL 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHIL 490 - Independent Study**

A special course designed primarily for students seeking knowledge in philosophy beyond course offerings. The student's interests, in consultation with department members, determines the topics covered. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHIL 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHIL 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Physical and Health Education (PE)

**PE 106 - Gymnastics Fundamentals**

This course is based on the study of PreK-12 developmentally appropriate gymnastics, with the recognition of individual and group uniqueness, acknowledging and valuing diversity. An emphasis will be placed on an educational gymnastics approach, utilizing movement concepts appropriate for teaching children body awareness and body control. Students will also learn skill progressions, spotting techniques, and biomechanical principles involved in a variety of gymnastic skills performed on traditional and non-traditional gymnastics equipment.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching or Health and Physical Education.

**PE 107 - Aquatic Fundamentals**

This course is designed to provide the student with an overview of a variety of aquatic activities. Consideration is given to basic swimming strokes, starts and turns, small craft safety, skin diving, elementary non-swimming rescue techniques, diving progressions from the deck, springboard diving, synchronized swimming, water polo, personal fitness, and aquatic games. This is a Theory and Technique Course (open to Physical Education majors or Aquatics minors only).

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment is limited to students with a program in School Wellness Education, Health-Physical Educ Teaching, Health and Physical Education or Aquatics.

**PE 113 - Golf**

This course is designed to introduce the student to all phases of golf through application of the skills used in these activities. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

Term(s) Typically Offered: Offered as Needed

**PE 114 - Orienteering**

This course is designed to teach the fundamental skills for traveling in the outdoors by map and compass in unfamiliar territory, and to introduce the sport of orienteering. The sport involves competitive cross country hiking/running on a set course as accurately and quickly as possible. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

Term(s) Typically Offered: Offered as Needed

**PE 115 - Yoga and Well-Being**

Yoga and Well-Being is an experiential and theoretical course that will introduce the student to the practice and examination of Yoga. The course will cover the practice of yoga postures (asanas), the use of controlled breathing (ujjayi) the engagement of body locks (bandhas), the study of yoga's historic background and the benefits of meditation and relations techniques. Additionally it will examine postures from an anatomical perspective providing the student with a comprehensive examination of proper alignment and correct positioning of the body in order to avoid injury. The course will present the many benefits of Yoga at a physical, mental and emotional level, and its application to the needs of our society today.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course

**PE 123 - Stand-Up Paddle Boarding**

This introductory course is designed to explore the fundamental skills and safety concepts necessary to paddle stand-up paddle boards (SUPs) effectively. Safety procedures will be emphasized such as, selection of waterways appropriate for an individual's skill set and experience level, self-rescue and group rescue approaches. Various paddling techniques including power strokes, turning strokes and bracing with the paddle will be examined. In addition, equipment selection and care, boating regulations, trip planning and logistics, outdoor leadership, basic water reading skills, flat water navigation skills, white water classification and minimum environmental impact techniques will be addressed. An overview of the various types of stand-up paddle boards (SUP) as well as necessary safety equipment will be explored.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms Odd

**PE 125 - Bicycling**

This introductory course is designed to explore the fundamental skills and safety concepts necessary to participate in bicycling effectively. Cycling techniques related to both on-road and off-road will be examined. Safety procedures, bicycling control, fitness and social benefits to the rider will be emphasized. Current trends in cycling technology will be examined. Additionally, strategies to minimize environmental impact will be explored.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms Even

**PE 131 - Foundations of Leadership in Physical Activity**

This course is designed to introduce the student majoring in Leadership in Physical Activity to the history, philosophies, professional organizations, important concepts, careers and trends in physical activity leadership.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**PE 133 - Tai Chi Chuan: Chinese Classical Exercise**

An introduction to the Chinese Classical Exercise System inspired by the Chinese "Book of Changes. Tai Chi Chuan concentrates on relaxed movement, proper breathing and attention to posture. Any age or physical performance level may participate. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

Term(s) Typically Offered: Offered as Needed

**PE 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**PE 140 - Downhill Snow Skiing I**

This course students to acquire a basic knowledge and appreciation of skiing as a sport and as a life-time leisure activity. Safety procedures and skiing etiquette also are discussed. Instruction takes place at Peek N' Peak Ski Resort. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

Term(s) Typically Offered: Offered as Needed

**PE 141 - Personal Physical Fitness**

This course provides students the opportunity for individual assessment and exercise programs to improve and/or maintain physical fitness and weight control. Principles involved with the maintenance of physical fitness, weight control, diets, and the aging process will be provided through lecture. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

Term(s) Typically Offered: Offered as Needed

**PE 146 - Beginning Swimming**

This course is designed to provide the novice or non-swimmer with the opportunity to learn elementary back stroke, water safety skills, diving and adjustment to water. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

Term(s) Typically Offered: Offered as Needed

**PE 149 - Tennis**

This course teaches basic fundamentals. The rules, regulations, and history of tennis also will be covered, along with strategies of the single and double games. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

Term(s) Typically Offered: Offered as Needed

**PE 152 - Principles of School Wellness I**

This course is an orientation to the art and the science of teaching physical education at the K-12 levels. Framed within the Collaborative Approach to Learning and Health: Whole School, Whole Community, Whole Child, students will study this latest collaborative approach to learning and health which is reflective of a local community and anchored in schools. Required school observations in diverse settings will provide students with the experience to observe and reflect upon class climate, responsibilities for fostering a positive learning environment and high quality teaching. The study of health trends in youth will envelop the latest model of how schools are promoting a comprehensive school-based physical activity model and the role physical education teacher play in it. Schools central to professional development including a writing assessment, resume development and starting a professional portfolio are used as artifacts of reflective practice at this initial state of teacher education. This is a Theory course (open to Physical Education majors only).

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching or Health and Physical Education.

**PE 166 - Coaching Practicum**

The coaching practicum is designed to provide the student with a realistic experience at a level and in a setting similar to that in which he/she wishes to obtain employment. The practicum experience is a 50-hour learning opportunity in which the student assists in all phases of the operation of an athletic program. The student may not be the head coach, unless a direct supervisor is present. The student may not be a current participating athlete on the team. The student may not work with the same team twice. Each experience must be at a different level if working with the same sport. A minimum of two different sports must be included in the practicum experiences. (For example: HS baseball, Little League baseball, HS football). Each student must complete a contract with the athletic program and submit the contract to the coaching practicum coordinator (University supervisor) for approval. The coordinator will then contact the athletic program for verification of the learning experience, dates of the experiences and details of evaluation procedures.

Prerequisites: PE 106<sup>D</sup> and (PE 171<sup>D</sup> or PE 356<sup>D</sup>) and PE 175<sup>D</sup> and PE 177<sup>D</sup> and (PE 260<sup>D</sup> or PE 242<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Spring & Summer Terms

**PE 168 - Physical Activity and Wellbeing in Society**

This course introduces students to inquiry techniques and strategies used to study human behavior in the social sciences. Also reviewed are patterns of social behavior as they relate to physical activity and well-being. Students will examine why physical activity behaviors have changed over time, and the effects these changes have had on humans and society. Students will analyze physical activity trends and initiatives throughout the world, and using a social-ecological approach will design a solution for how communities, businesses, schools and workplaces can re-engineer physical activity back into society.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**PE 175 - Teaching of Track and Field**

Emphasizes track and field skill acquisition along with identification of appropriate teaching methods associated with these activities. This is a Theory and Technique Course (open to Physical Education majors only).

Credits: 1

Term(s) Typically Offered: Offered as Needed

**PE 177 - Teaching of Self-Defense/Lacrosse**

The course deals with the skills, knowledge, and attributes needed for self-defense and lacrosse. This course also emphasizes the teaching, coaching, officiating, and physical skill development of men's and women's lacrosse. This is a Theory and Technique Course (open to Physical Education majors only).

Credits: 1

Term(s) Typically Offered: Offered as Needed

**PE 181 - Adventures in Backpacking**

This course teaches the basic knowledge and skills of backpacking travel in a temperate environment. Techniques such as how to use and to carry a backpack, hiking skills including route selection and trail negotiation with a pack, map, and compass techniques, knowledge and care of backpacking equipment, planning backpacking trips, and environmentally sound backpacking skills will be covered. The course includes a mandatory weekend trip to put skills to practical use. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

Term(s) Typically Offered: Offered as Needed

**PE 182 - Introduction to Rock Climbing**

This course introduces students to the fundamental skills of top rope rock climbing. Beginning skills in belaying, static climbing, rappelling, prussiking, artificial wall climbing safety considerations and minimal environmental approaches will be covered. The student will be introduced to various teaching methodologies and classroom management approaches specific to rock climbing community and commercial settings.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms

**PE 184 - Adventure Games**

This course is designed to provide physical activity and direct experience in adventure challenges requiring self-discipline, willingness to try, and personal commitment. Coursework includes physical fitness and flexibility exercises, aerobic games, cooperative games and nongames, group initiatives, trust activities, and challenge course low and high elements involving perceived physical and psychological risk and challenges. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

Term(s) Typically Offered: Offered as Needed

**PE 186 - Cross Country Skiing and Snowshoeing**

This introductory course is designed to explore the fundamental skills and safety concepts necessary to participate in cross country skiing and snowshoeing effectively. The physical and cognitive benefits of outdoor aerobic activities will be addressed. Safety approaches to cold weather activities will be explored. Various skiing and snowshoeing techniques including diagonal stride, kick concept, double poling, descending/ascending, striding, turning and walking/running will be examined. In addition, equipment selection and care, trip planning and logistics, and minimum environmental impact techniques will be addressed.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

**PE 187 - Flat-water Canoe Tripping**

This course teaches the basic skills and concepts of flat-water canoe camping, such as how to enter and to exit a canoe, tandem paddling techniques, canoe safety, and canoe portaging. Students will also learn basic canoe camping skills, including food planning, how to use camping equipment, and minimum impact camping techniques. Students will participate in a mandatory weekend canoe camping experience to put learned skills to practical use. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

Term(s) Typically Offered: Offered as Needed

**PE 188 - Sailing**

This course offers students an opportunity to develop skills, to learn techniques, and to achieve personal satisfaction in beginning sailing. The course also involves the knowledge and application of the rules of water safety to the sport of sailing. This class is designed for beginners. At its conclusion students will be able to enjoy sailing as a lifetime recreational sport. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

Term(s) Typically Offered: Offered as Needed

**PE 189 - Basic Canoeing**

Instruction focuses on the fundamental skills and concepts needed to operate a canoe effectively. Furthermore, the student will be introduced to various teaching methodologies and classroom management approaches for teaching in non-traditional settings. Safety procedures will be emphasized including self-rescue and group rescue approaches. Various paddling techniques including power strokes, turning strokes and bracing with the paddle will be examined. In addition, equipment selection and care, boating regulations, trip planning and logistics, outdoor leadership, basic water reading skills, white water clarification and minimum environmental impact techniques will be addressed. An overview of the various types of and safety equipment will be explored.

Credits: 2

Term(s) Typically Offered: Offered as Needed

**PE 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PE 191 - Foundations of School Wellness**

This course is designed to introduce the student to the historical, philosophical, cultural and sociological influences that have shaped the profession of teaching health and physical education. A foundational perspective will be taken to clarify the related disciplines, history and current issues of health and physical education and of education, from the ancient cultures to the 21st century. Including the framework involved in the Whole School, whole child, whole Community (WSCC) Model, the Comprehensive School Physical Activity Program (CSPAP) and the Health Optimizing Physical Education (HOPE) Model.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching or Health and Physical Education.

**PE 192 - Diversity Issues in Physical Education**

This course will explore differences among students within a variety of physical education settings. Students will learn about other people and explore how others view participation in physical activity and exercise. This course will help students become sensitive to and appreciate the diversity of others, thus, demonstrating responsible social behaviors that will enable them to interact in a positive manner with diverse groups within the physical education enrichment. This is a Theory and Technique Course.

Credits: 2

Term(s) Typically Offered: Offered as Needed

Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching or Health and Physical Education.

**PE 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**PE 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PE 202 - Technology for Wellness**

This course is designed to provide the student with an overview of the various types of technology that can be utilized in the area of wellness and fitness. The purpose of this course is to familiarize and enhance students' technology skills to support instruction in various education, wellness and fitness settings. The course includes personal computer use in creating materials to enhance instruction, promotion and assessment. Also included are other emerging technologies, in addition to various internet options. A portion of the course will be conducted using SRU's Learning Management System.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**PE 227 - Introduction to Adapted Physical Activity**

Develop an understanding of disabilities and apply that knowledge in the application of active-living, community-based physical activity programs.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**PE 230 - Teaching and Coaching of Track & Field**

This course is designed to introduce the student to the teaching and coaching aspects of track & field. Skill acquisition, strength and conditioning methods, teaching and coaching skills and historical perspectives of track & field will be studied. Emphasis will be placed on planning and applying developmentally appropriate activities for all learners.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms, Offerings Vary



**PE 231 - Strategies for Teaching Physical Activity**

This course is designed to teach evidence-based educational methods and adult learning strategies to equip the student to educate individuals throughout the lifespan through: 1) a basic understanding of learning and developmental theories; 2) communication techniques; 3) positive behavior management; 4) environmental modifications; and 5) group engagement strategies.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**PE 236 - Introduction to Kayaking**

This introductory course is designed to explore the fundamental skill and safety concepts necessary to paddle a kayak effectively. Safety procedures will be emphasized such as entering and exiting the kayak, the bow rescue, the Eskimo roll, as well as self-rescue and group-rescue approaches. Various paddling techniques including power strokes, turning strokes, and bracing with the paddle will be examined. In addition, equipment selection and care, boating regulations, tripping planning and logistics, outdoor leadership, basic water reading skills, white water classification and minimum environmental impact techniques will be addressed. An overview of the various types of kayaks and kayaking, such as whitewater kayaks, sit-on-top kayaks, and touring kayaks, as well as necessary safety equipment, will be explored.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

**PE 237 - Emergency Medical Response**

This course is designed to provide the student with the knowledge and skills necessary to work as an emergency medical responder (EMR) to help sustain life, reduce pain and minimize the consequences of injury or sudden illness until more advanced medical help takes over. The course content meets or exceeds the current Emergency Medical Services Educational Standards for Emergency Medical Responders and current NATA Education Competencies.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**PE 238 - Applied Principles of Exercise**

This course will provide students with an understanding of applied exercise principles associated with both health and skill related fitness, topics will include: warm up and cool down protocols, exercise frequency, intensity, type and time (FITT) principles, overload, progression, specificity, regularity and individuality (Basic Training Principles) and target heart-rate.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**PE 240 - Downhill Snow Skiing II**

Advanced techniques of downhill skiing are presented. Instruction takes place at Peek N' Peak Resort. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

Term(s) Typically Offered: Offered as Needed

**PE 241 - Outdoor Pursuits**

This course is designed to introduce the student to the varied but interrelated topics of outdoor pursuits, adventure programming, experiential education, group problem-solving, and cooperative games philosophy. The course will provide physical activity, direct experience, and leadership techniques in adventure challenges which require self-discipline, a willingness to try, and personal commitment. This is a Theory and Technique Course.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course

**PE 242 - Physical Health and Fitness Education**

This course is designed to provide knowledge of evidence based benefits associated with regular physical activity along with knowledge to develop, organize, administer and assess age appropriate physical activity and fitness programs for children, adolescents and adults.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**PE 243 - Educational Movement in Health & Wellness**

This course helps students achieve individual competency in applying educational gymnastics, fundamental movement, educational/multicultural games and educational/creative dance to learn Laban's educational movement concepts through the use of cooperative learning, problem solving and guided discovery. Students construct developmentally appropriate interdisciplinary standards-based expressive movement experiences that show meaningful application to children's learning inclusive of children with special needs and English language learners. Content will also address health and wellness concepts central to grades PreK-4 as it relates to educational movement. Students will reflect (metacognition) upon their educational movement experiences including but not limited to individual competency, diversity, critical thinking, core subject integration and differentiating instruction.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Transfer Thread Completion Course

**PE 250 - Equine Assisted Activities**

An introduction to equine assisted activities including basic safety skills, lesson preparation, benefits for individuals with disabilities, tack/equine selection, and certification procedures. Students will gain practical experience through riding horses and assisting individuals with disabilities during lessons.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**PE 253 - Principles of School Wellness II**

This course is an orientation to the art and the science of teaching physical and health at the K-12 levels. Framed within the National Standards & Grade Level Outcomes for K-12 Physical Education (SHAPE America, 2014) pre-service teacher candidates will study curriculum models, grade level outcomes, class organization, management and safety techniques, developmentally appropriate communication techniques, health and wellness integration strategies infused in lessons, locating and using professional resources for planning and teaching, lesson plan writing, a spectrum of direct and indirect teaching styles, systematic observation tools, teaching and post-lesson reflecting. Skills central to professional development include lesson plan writing, class organization and management documentation, systematic observation of teaching, post-lesson reflecting. Pre-service teacher candidates will build on the professional portfolio started in PE 152 using artifacts.

Prerequisites: PE 152<sup>C</sup> and PE 383<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2.

Enrollment is limited to students with a program in School Wellness Education.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**PE 258 - Social & Emotional Wellness**

This course is designed to examine topics relating to psychosocial health & wellness of school aged youth as a part of a comprehensive approach to school wellness. Future educators will learn how to address topics such as respect and appreciation for all persons, bullying, conflict resolution, stress reduction, suicide prevention, depression, anxiety and high-risk behavior with K-12 students.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**PE 262 - Adapted Aquatics**

Develop knowledge base in the study of disability through discussion and practical experiences as it relates to aquatic programming.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**PE 263 - Lifeguarding**

The lifeguarding course is designed to provide lifeguard candidates with skills and knowledge necessary to keep patrons of aquatic facilities safe in and around water. This course includes techniques with aquatic-specific first aid and cardiopulmonary resuscitation (CPR) training, Automated External Defibrillation, Oxygen Administration and training in specific water environments. Offered to all students.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**PE 266 - Disability Sport in the 21st Century: A Global Perspective**

This course is designed to introduce the students to the study of Disability Sport across the world. Students will study the history, current movement, and future developments of Disability Sport in an ever changing and emerging field of sport for persons with disabilities.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**PE 268 - Contemporary Topics in Health**

This course is designed to introduce students to current issues in health and wellness and provide opportunities for students to assess health needs in school and community settings. In this course, students will identify programs and initiatives that promote healthy living and improve well-being based on the health needs of society.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**PE 270 - Psychological and Sociological Bases of Sport**

This course provides students with an understanding of the relationships between sport and various psychological and sociological factors. This is a Theory and Technique Course.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching, PE-Physical Activ&Fitness Mgmt, Health and Physical Education or Athletic Training.

**PE 272 - Enhancing Fitness through Running and Walking**

This course is designed to teach students how to personally perform and to lead others in aerobic physical activities using indoor and outdoor settings. This course focuses on leading fitness enhancing activities through running, trail-running, Nordic walking, community walking and hiking. These activities are designed to improve aerobic fitness, manage weight and promote healthy lifestyles. The settings include roadways, trails and community common areas. Course content centers on individual and group health and fitness, and strategies for conveying this information.

Credits: 2

Term(s) Typically Offered: Offered as Needed

**PE 274 - Assessment Strategies in Physical Education**

This course content is designed to give the student an understanding of assessment techniques used in physical education. Students will learn the various techniques used for assessing as applied in the public school setting. Students will have the opportunity to use several of the computer applications related to physical education. This is a Theory and Technique Course.

Prerequisite: PE 152<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching or Health and Physical Education.

**PE 275 - Women in Sport**

This course emphasizes the problems, processes and patterns of sport involvement of women in utilizing an historical, sociological, psychological and biological approach. The focus is primarily on women in the United States, although the sport participation of women in other cultures is also examined. This is a Theory and Technique Course (open to Physical Education majors only).

Credits: 3

Term(s) Typically Offered: Offered as Needed

**PE 276 - Skate-Based Action Sports**

This course explores the fundamental skills and safety concepts necessary to engage in skate-based action sports effectively. Safety procedures such as, choosing locations and terrain appropriate for an individual's skill set and experience level are emphasized. Skate-based learning progressions address various skating techniques including proper stance, effective stopping, efficient pushing, turning, carving, sliding, core-specific land paddling strokes and bracing with the paddle. In addition, equipment selection and care, safety equipment requirements, regulations, trip planning and logistics, outdoor adventure leadership, and minimum environmental impact techniques are examined. There is an overview of the various types of skateboards longboards/land paddling boards and in-line skates as well as necessary safety equipment.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

**PE 289 - Advanced Canoeing**

This course teaches students the advanced skills and techniques of canoeing. Safety instruction is emphasized. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 1

Term(s) Typically Offered: Offered as Needed

**PE 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PE 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**PE 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PE 301 - Sports Officiating**

This diverse class is designed to provide the student with an overview of the techniques required for officiating various sports. The official's role and rules of the game(s) will be presented, and opportunities will be provided for practical officiating experience. This will be followed by comprehensive analysis of the student's officiating style, knowledge of the rules and professionalism.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 302 - Foundations of Online Teaching and Learning**

The course is designed to provide learners opportunities to understand the foundations of distance education. Students will be able to demonstrate competencies and skills to apply instructional strategies to develop curriculum that meets the needs of distant learners. In addition, students will be able to use various assessment methods to evaluate student learning through distance education.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**PE 303 - Using Educational Technology to Enhance Learning**

This course is designed to provide students with the knowledge and skills necessary to effectively use educational technology to enhance learning in both a traditional face-to-face classroom and also through distance or cyber education.

Credits: 3

Term(s) Typically Offered: Offered Winter Terms

Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**PE 304 - Teaching Physical Education through Distance Education**

This course is designed to provide students with the knowledge and skills necessary to effectively teach physical education through distance or cyber education.

Prerequisites: PE 302<sup>C</sup> and PE 303<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**PE 305 - Teaching Health Education through Distance Education**

This course is designed to provide students with the knowledge and skills necessary to effectively teach health education through distance or cyber education.

Prerequisites: PE 302<sup>C</sup> and PE 303<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**PE 306 - Conditioning for Athletic Performance**

This course is designed to engage and immerse students in the theory and application of power and speed training as well as athletic motor skill development. Students will study the relationships among biomotor abilities and apply training principles and methods associated with the development of power-based athletic skills. Students will design and apply daily-, short- and long-term training programs for coaching athletes who seek improved athletic performance.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 310 - Elementary School Wellness Skills and Fitness Activities**

This course is designed to engage and immerse the student in the Society for Health and Physical Education (SHAPE) elementary grade level standards for health and physical education knowledge and skills. Along with these standards this course will engage students in developmentally appropriate activities and lesson plan concepts that will ensure the teacher candidates understand the developmental progression of fundamental motor skills, their application to higher level movement, fitness and rhythmic. Teacher candidates will develop knowledge to create physically literate elementary aged learners who are prepared to lead a healthy active and well life.

Prerequisites: PE 152<sup>C</sup> and PE 383<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**PE 311 - Middle School Wellness Skills and Fitness Activities**

This course is designed to engage and immerse the teacher candidate in the Society for Health and Physical Education (SHAPE) middle school grade level standards for health and physical education knowledge and skills. Along with these standards this course will engage teacher candidates in developmentally appropriate activities and lesson plan concepts that will ensure that they understand how to develop physical skills and knowledge to create physically literate middle school aged learners are prepared to lead a healthy active and well life.

Prerequisite: PE 310<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**PE 312 - Secondary School Wellness Skills and Fitness Activities**

This course is designed to engage and immerse the teacher candidate in the Society for Health and Physical Education (SHAPE) high school grade level standards for health and physical education knowledge and skills. Along with these standards this course will engage teacher candidates in developmentally appropriate activities and lesson plan concepts that will ensure that they understand how to develop specialized health optimizing physical activity and knowledge to create physically literate high school aged learners who are prepared to be healthy and active adults and college or career ready.

Prerequisite: PE 310<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**PE 328 - School Nutrition and Wellness**

This course will provide students with information about the K-12 school nutrition environment and school nutrition services as defined by the Society of Health and Physical Educators (SHAPE America). Students will learn strategies for teaching K-12 students to reach and maintain a healthy weight as well as strategies for modeling healthy dietary behaviors and providing opportunities for healthy eating in schools. The role of the collaboration between school wellness educators, food service personnel, School Nurses and Registered Dietitians for improving students' nutrition and wellness will be discussed. This course is designed to provide the student with an understanding of the fundamental aspects of nutrition concepts and how they are applied to the K-12 settings.

Prerequisite: PE 268<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**PE 331 - Evidence-Based Physical Activity**

This course is designed to introduce students in current theories, models and successful interventions used in physical activity promotion including: factors/barriers influencing physical activity among children/ adolescents and adults. The focus of the course is on the acquisition of evidence-based practices that lead to appropriate assessment strategies, implementation models and evaluative techniques.

Prerequisites: PE 131<sup>D</sup> and PE 231<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**PE 332 - Administration and Management of Physical Activity**

This course is designed to teach students how to ethically administered, manage and evaluate physical activity programs in the community with respect to managing operations, developing and managing financial resources and managing human resources.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**PE 334 - Applied Methodologies in Adventure**

This course is designed to teach evidence-based educational methods and learning strategies to equip the student to educate individuals in a variety of adventure throughout the lifespan through variety of adventure activities. A number of pertinent topics specific to adventure education will be addressed including, foundational knowledge, self-awareness and professional conduct, decision making and judgment, experiential teaching and facilitation, environmental stewardship, adventure program management, adventure safety and risk management, inclusive learning, and technical ability.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in School Wellness Education, Health-Physical Educ Teaching, Health and Physical Education or Adventure Fitness.

**PE 335 - Science of the Mind-Body Connection**

This course will introduce students to a variety of fitness activities such as yoga, Pilates along with other physical activities associated with nature all with a mind and body connection and associated with stress management and overall health-related fitness. This course will explore the interconnectedness of the mind and body in relation to quality of life and prevention of chronic disease.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Conservation, Technology & Imagination, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 338 - Teaching and Leading Group Exercise**

This course provides opportunities for practical skills and instruction to prepare the student to teach and lead various large group fitness activities involving children, adolescents and adults. Emphasis is placed on design, developmental appropriateness, safety and modifications for diverse populations who are apparently healthy.

Prerequisite: PE 238<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 342 - Wellness through Movement**

This course is designed to provide the student with scientifically based knowledge concerning the benefits of physical activity along with the consequences associated with a lack of physical activity both on a personal and societal level. Students will participate in application of physical activity training, health-related fitness assessments and lifestyle modification activities.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 345 - Teaching and Coaching of Water Polo**

This course is designed to introduce the student to the teaching and coaching aspects of water polo. Skill acquisition, strategy and tactics, strength and conditioning, teaching and coaching skills for water polo will be studied. Emphasis will be placed on planning and applying developmentally appropriate activities for all learners.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 348 - Aquatic Leadership**

This course is designed to prepare students for leadership responsibilities in the field of aquatics. Program development, facility operation, risk management, and staff management will be included in this course.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 349 - Skin and Scuba Diving**

This course provides students with the opportunity to learn a wide variety of skin and scuba diving skills, including rescue techniques. In addition, emphasis will be placed upon the following: 1) selection, care, and use of diving equipment, 2) physical and biological aspects of various diving environments, 3) first aid as applied to scuba diving, including cardio-pulmonary resuscitation, and 4) aspects of physics, physiology, and medicine related to the diver's performance in the water. This is a Wellness and Lifetime Activity Course (offered to all students).

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 352 - Secondary Physical Education Teaching Methods**

Designed as a third level pedagogy class. This course offers "in-depth continuation of the study and application of effective teaching and learning in the secondary physical education classroom. This is a Theory and Technique Course (open to Physical Education majors only).

Prerequisite: PE 274<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching or Health and Physical Education.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.



**PE 353 - Adapted Physical Activity and Health Through the Lifespan**

This course is designed to investigate the concept of transition across the lifespan with regard to health promotion and physical activity for individuals with disabilities. Students will develop and implement appropriate physical activity programs for specific developmental lifespan stages.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 356 - Net/Wall Activities and Games**

This course is designed to introduce the student to games and skills associated with a variety of racquet activities and games, which will include tennis, badminton, racquetball, volleyball, and table tennis. Emphasis will be placed on planning and applying developmentally appropriate activities for all learners. This is a Theory and Technique Course (open to Physical Education majors only).

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 357 - Territory Activities and Games**

This course is designed to introduce the student to the games and skills associated with a variety of territory activities and games, which will include flag football, basketball, hockey and soccer. Emphasis will be placed on planning and applying developmentally appropriate activities for all learners.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 358 - Lifetime/Leisure Activities and Games**

This course is designed to introduce the student to the games and skills associated with a variety of target activities including, but not limited to, golf, bowling, and archery. Emphasis will be placed on planning and applying developmentally appropriate activities for diverse learners. This is a Theory and Technique Course (open to Physical Education majors only)

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 359 - Striking/Fielding Activities and Games**

This course is designed to introduce the student to the games and skills associated with a variety of striking/fielding activities, which will include softball, cricket, and rounders. Emphasis will be placed on planning and applying developmentally appropriate activities for all learners. This is a Theory and Technique Course (open to Physical Education majors only).

Credits: 2

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 360 - Anatomical and Physiological Basis of Physical Activity/Lab**

This course is designed to provide the basic anatomical and physiological principles that have direct application to physical activity movement and health for populations. Weekly laboratory sessions will provide practical application experiences to illustrate the theoretical knowledge base.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 362 - School Health Education Methods**

The course focuses on Health Education curriculum design and developmentally appropriate instructional techniques that can be utilized for health promotion in school settings. Course included universally accepted pedagogical strategies with opportunities to observe and practice these strategies with K-12 health education content.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students in the BS ED1151 program.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**PE 363 - Lifeguarding Instructor**

The purpose of the Lifeguarding Instructor course is to train instructor candidates to teach lifeguard training, first aid, lifeguard management, CPR for the professional rescuer, AED essentials, oxygen administration for the professional rescuer, preventing disease transmission, community water safety, and basic water rescue. The training in this instructor course prepares instructor candidates by developing their understanding of how to use course materials, how to conduct training sessions, and how to evaluate participants' progress.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 364 - Biomechanics of Individuals with Disabilities**

A study of human movement patterns with emphasis on the development of efficient movement for special populations. Efficient movement patterns will be based on anatomical, mechanical, and physiological principles.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 369 - Philosophy and Psychology of Coaching**

This course emphasizes the relationships involved in the association of the coach with the administration, student body, players, press and community. This is a Theory and Technique Course.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 378 - Teaching and Leading of Strength and Resistance Training**

This course is designed to provide practical knowledge to prepare students to teach, lead and effectively design individualized weight training and/or a muscular fitness programs. Students will apply principles of resistance training in a hands-on setting with specific emphasis on techniques, strength and endurance training, safety procedures, equipment and individualized programming.

Prerequisite: PE 238<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 379 - Fitness Management**

This course provides the knowledge base to effectively design, promote, manage and assess health related fitness programs in a variety of community and commercial facilities. A wide range of teaching, leading and managing practices associated directly with health fitness facilities will be reviewed.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 383 - Motor Development and Learning**

This course introduces the student to the factors influencing the changes in the development and learning of motor skills from infancy to adolescence. Practical laboratory activities are utilized to illustrate basic concepts of motor development and motor learning. This is a Theory and Technique Course (open to Physical Education majors only).

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1 or Freshman 2 may **not** enroll.

Enrollment is limited to students with a major in School Wellness Education or Health-Physical Educ Teaching.

**PE 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 393 - Nutrition for Physical Activity, Exercise, and Health**

Students in this course will study nutrition guidelines and standards for physical activity, exercise, and health. This course will cover metabolism, macro and micronutrients, energy expenditure, and fluid and electrolyte requirements. Current trends and claims of diets and supplements will be evaluated, and nutrition differences between individuals and athletes will be discussed.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Cultural Literacy & Community Building, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PE 420 - Field Experience**

This course is designed to provide students with experiences which allow them to apply their knowledge and skills in a practical worksite situation. This is a Theory and Technique Course (open to Physical Education majors only).

Corequisite(s): PE 042

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 430 - Living Well**

This course, which is the capstone course for the Living Well program is designed to engage and immerse the student in evidence-based literature related to living well while building self-evaluation and motivation strategies. Content areas emphasized will be physical activity, nutrition/dietary guidelines and stress. This course will also engage students in experiential education opportunities and reflection on these experiences. These experiences will be anchored by co-curricular opportunities provided on campus through the Aebersold Recreation Center, Aramark Nutrition Services, the Slippery Rock University Health Center and the Slippery Rock University Leadership office.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**PE 446 - Water Safety Instruction**

The purpose of this instructor course is to train instructor candidates to teach American Red Cross Swimming and Water Safety courses. It is a certification course for American Red Cross Water Safety Instructor (WSI).

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 450 - Internship**

Supervised placement or research in selected private or public agencies.

Prerequisites: PE 131<sup>D</sup> and PE 231<sup>D</sup> and PE 202<sup>D</sup> and PE 331<sup>D</sup> and PE 332<sup>D</sup> and PE 473<sup>D</sup> and PE 242<sup>D</sup> and PE 360<sup>D</sup> and PE 268<sup>D</sup> and PE 335<sup>D</sup>  
<sup>D</sup> Requires minimum grade of D.

Credits: 1-12

Term(s) Typically Offered: Offered Fall, Spring, & Summer

**PE 452 - Elementary Strategies for School Wellness**

This professional methods course will provide the preservice teacher candidate with knowledge and skills to effectively contribute to a culture of school wellness through a high quality physical and health education program. Students will develop best-practice planning, teaching and assessment strategies and apply them in a semester-long field experience involving grades K-6. this will also include designing initiatives from leading comprehensive school wellness programs.

Prerequisites: PE 253<sup>D</sup> and PE 310<sup>D</sup> and PE 328<sup>D</sup> and PE 383<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 6

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching or Health and Physical Education.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**PE 455 - Student Teaching - Physical Education**

Under the guidance of a cooperating teacher and university supervisor, students in this course engage in two eight- week assignments on a full-time basis in specified school districts and attend scheduled seminars. Additional assignments required. This is a Theory and Technique Course (open to Physical Education majors only).

Prerequisite: PE 452<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 12

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching or Health and Physical Education.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**PE 460 - Program Design in Adapted Physical Activity**

Develops competencies in the implementation of developmentally appropriate activities for children and adults with disabilities in the school and through transitional programs conducted within the community.

Prerequisite: PE 227<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 462 - Secondary Strategies in School Wellness**

This professional methods course will provide the preservice teacher candidate with knowledge and skills to teach and lead school wellness education at the middle and high school levels. Strategies for facilitating lessons and activities that promote lifelong physical activity and overall wellness will be employed; and the teacher candidate will work collaboratively with a public school mentor teacher under the supervision of the university professor(s) to implement these strategies in schools.

Prerequisites: PE 268<sup>D</sup> and PE 253<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 6

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching or Health and Physical Education.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**PE 468 - Senior Seminar in Physical and Health Education Teacher Education**

This course is designed to provide a capstone overview of the organization, management and application of physical education and health instructional and extra-class programs. Content focuses on current issues and trends in the discipline. This is a Theory and Technique Course (open to Physical Education majors only).

Prerequisite: PE 352<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 2

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in School Wellness Education, Health-Physical Educ Teaching or Health and Physical Education.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**PE 472 - School Wellness Assessment and Promotion**

Provide teacher candidates with conceptual tools to analyze health-related behaviors of school-aged learners and the social, cultural and environmental context in which they occur. This course will apply theories drawn from public health, psychology and sociology to the process of planning and evaluating wellness instruction in schools that assists learners in developing and maintaining healthy behaviors. The process of collecting, tracking and analyzing health-related data will be included in the course as well as current applications, programs and tools that can be used to track and improve health behaviors.

Prerequisite: PE 253<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Corequisite(s): PE 462

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**PE 473 - Professionalism, Advocacy and Leadership in Physical Activity**

This course is designed to actively involve the learner in an advanced study of physical activity. The course is conducted in seminar format and the students will study the application of the principles, methods, organization and administration of individualized physical activity programs and the development of professional, advocacy and leadership qualities and skills.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 485 - Fundraising/Grant Writing in Adapted Physical Activity**

This course is designed to develop competencies in fund raising strategies utilizing grant writing skills geared toward corporations and charitable foundations. Students will study the specific skills needed to develop a funding concept, preparation of the proposal, and the establishment of relationships with potential donors.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with department of Special Education or Physical and Health Education.

**PE 490 - Independent Study**

With the approval of the students' advisors and departmental chairperson, students may pursue an individual project in physical education especially suited to meet the students' needs. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PE 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**PE 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Physics (PHYS)

**PHYS 101 - Concepts of Science I with Lab**

A descriptive and conceptual course in physics designed for the non-science major. Topics are selected from light, sound, motion, and astronomy to develop a necessary scientific attitude and background for today's society. There are two lectures and one-two hour laboratory per week.

Credits: 3

Term(s) Typically Offered: Offered Every Term

**PHYS 102 - Concepts of Science II**

A descriptive and conceptual course in physics designed for the non-science major to study energy systems. Topics are selected from heat, electricity, magnetism, and the structure of matter and modern areas of physics, such as lasers, X-rays, and nuclear energy. The purpose of the course is to develop a positive scientific attitude and background for today's society. No laboratory.

Credits: 3

**PHYS 103 - Investigating Matter and Energy/ Lab**

This is an activity-based and discussion-oriented course designed for the non-science major. The topics of light, matter, heat, and electricity have been selected to help students develop meaningful understanding of some powerful ideas that they can apply to a wide variety of interesting phenomena. Laboratory credit is given for taking this liberal studies enrichment course.

Credits: 3

**PHYS 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**PHYS 140 - Engineering Graphics I**

A beginning laboratory course in technological design and drawing. Topics: lettering, scales, geometric construction, orthographic sketching, and auxiliary views.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms Odd

**PHYS 141 - Engineering Graphics II**

An advanced laboratory course in technological drawing and implementation. Topics: Vectors, graphing, nomography, isometric pictorials, technical illustration, computer graphics, and working drawings.

Prerequisite: PHYS 140<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

**PHYS 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PHYS 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**PHYS 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PHYS 201 - Elements of Physics I with Lab**

Introduction to physics at the algebra/trigonometry mathematical level. Topics include: mechanics, fluids, oscillations, waves, and sound. Course is especially designed for students enrolled in health science majors. This course must be taken with Elements of Physics Lab PHYS021.

Credits: 4

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Enrollment limited to students with department of Exercise & Rehabilitative Sci.

**PHYS 202 - Elements of Physics II/ Lab**

Introduction to physics at the algebra/trigonometry mathematical level. Topics include: thermal physics, optics, electricity and magnetism, and nuclear physics. Course is especially designed for health science majors. This course must be taken with Elements of Physics II Lab PHYS022.

Prerequisite: PHYS 201<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Spring & Summer Terms

Enrollment limited to students with department of Exercise & Rehabilitative Sci.

**PHYS 204 - Environmental Biophysics**

An introductory course covering the energy problem and alternative solutions; radiation and its effects on man; the eye and vision; the ear, hearing and noise pollution; electrical power production alternatives and the environmental costs; some instruments used in biophysics and medicine.

Credits: 3

**PHYS 211 - General Physics I with Lab**

Introduction to physics using calculus and including extensive problem solving. Topics include mechanics statics, kinematics, kinetics, work-energy, rotational motion, and impulse-momentum. This course must be taken with General Physics Lab PHYS011.

Prerequisite: MATH 225 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Fall & Spring Terms

**PHYS 212 - General Physics II with Lab**

This is a calculus based course, which follows PHYS 211. It develops the concepts of electric and magnetic fields. Topics covered are Gauss' Law, Ampere's Law, Biot's Law, Faraday's Law, electric charges and their dynamics, capacitance, resistance inductance, etc. Offered fall semester only. Includes a lab.

Prerequisites: MATH 225<sup>D</sup> and PHYS 211<sup>D</sup> and MATH 230 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**PHYS 213 - General Physics III/ Lab**

Covers fluids, hydrostatics and hydro-dynamics, heat transfer and measurements, laws of thermodynamics, vibrating bodies, wave motion, light lenses and optical instruments, interference and diffraction, polarization. This course must be taken with General Physics III Lab PHYS023. Offered spring term only.

Prerequisite: PHYS 211<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

Term(s) Typically Offered: Offered Spring Terms

**PHYS 216 - University Physics 1 with Lab**

First of a two semester calculus based introduction to physics sequence for science, engineering, and mathematics students. Students will acquire knowledge of fundamental physics principles and their applications as well as problem solving skills and laboratory and data acquisition experience. Topics covered: kinematics, dynamics, momentum of particles and rigid bodies, work and energy, gravitation, simple harmonic motion, and waves. This course must be taken with University Physics 1 Lab.

Prerequisite: MATH 225 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4

**PHYS 217 - University Physics 2 with Lab**

Second of a two semester calculus based introduction to physics sequence for science, engineering, and mathematics students. Students will acquire knowledge of fundamental physics principles and their applications as well as problem solving skills and laboratory and data acquisition experience. Topics Covered: Fluids, Thermodynamics, Electricity and Magnetism, Circuits, and Optics. This course must be taken with University Physics 2 Lab.

Prerequisites: PHYS 216<sup>D</sup> and MATH 230 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 4



**PHYS 271 - Astronomy**

This course is designed for the general student. Recent findings in astronomy are discussed, i.e., black holes, quasars, etc. Other topics of interest are the evolution of stars, galaxies, and the universe since the big bang. No math required.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Institutions & Human Innovations, Transfer Thread Completion Course

**PHYS 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PHYS 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**PHYS 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PHYS 301 - Physical Chemistry I**

Thermodynamics and chemical kinetics. Cross listed as CHEM301.

Prerequisites: CHEM 108<sup>D</sup> and CHEM 112<sup>D</sup> and (PHYS 212<sup>D</sup> or PHYS 213<sup>D</sup>) and MATH 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 312 - Modern Physics 1**

An introductory course that focuses on the transition from classical physics covered in the calculus based introductory physics sequence to contemporary physics. Topics include: Brief overview of special relativity, experimental and theoretical developments that led to the discovery of the atomic structure, early quantum mechanics, Schrodinger's equation and its application and a brief introduction to solid state physics.

Prerequisites: PHYS 212<sup>D</sup> and PHYS 213<sup>D</sup> and MATH 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 314 - Statics**

Includes the application of equilibrium conditions to structures, trusses, frames and machines, and beams with concentrated and distributed loads.

Prerequisites: PHYS 211<sup>D</sup> and MATH 230 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 315 - Dynamics**

Integrates the subject content of kinematics and kinetics that deal respectively with the description of motion of bodies and the causes for their motion.

Prerequisites: PHYS 314<sup>D</sup> and ENGR 210<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 317 - Space Science**

Introductory course in space exploration. It emphasizes the evolution of the earth with respect to its neighbors in the solar system. Other topics covered are the earth's ionosphere, magnetosphere, hazards of satellite communication, and orbital dynamics.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 325 - Analog & Digital Electronics**

An introductory analog and digital electronics course designed primarily for science students. The course will start with an analysis of AC and DC circuits using Kirchhoff's laws and complex numbers. The analog part will include a study of discrete components including diodes, transistors, and SCRs as well as linear integrated circuits. The digital part will include basic gates as well as MSI and LSI circuits and will be center around interfacing computers to experiments.

Prerequisite: PHYS 212<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 331 - Mathematical Methods of Physics**

Applications in physical science and engineering of the following: vector analysis, complex variables, Fourier and Laplace transforms, linear algebra, and some boundary value problems. Cross-linked as MATH 331. This course may be counted as a physics course or as a mathematics course, but not both.

Prerequisites: MATH 240<sup>D</sup> and PHYS 211<sup>D</sup> and MATH 231 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 371 - Physical Optics**

This is a physical optics course dealing with the nature and transmission of light. Topics covered will include the propagation of light, coherence, interference, diffraction, Maxwell's Equations, optics of solids, thermal radiation, optical spectra and lasers.

Prerequisites: PHYS 212<sup>D</sup> and PHYS 213<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 375 - Thermal Physics**

This is an introductory course in thermodynamics and statistical mechanics, with application to both physics and engineering.

Prerequisites: PHYS 213<sup>D</sup> and MATH 231<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 381 - Advanced Physics Laboratory**

Selected experiments in all branches of physics that are of a more advanced grade than those given at the general or intermediate level. Each experiment will be an extended piece of careful, thorough work, culminating in a detailed report.

Prerequisites: PHYS 211<sup>D</sup> and PHYS 212<sup>D</sup> and PHYS 213<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**PHYS 382 - Optics Laboratory**

This course will provide in depth experience in laboratory techniques, data acquisition and analysis in the field of Optical Physics. Experiments are of a more advanced grade than those given at the general or intermediate level. Each experiment will be an extended piece of careful, thorough work, culminating in a detailed report. Appropriate for students majoring in the Biological, Earth, Environmental, Health, Mathematics and Physical sciences.

Prerequisites: PHYS 211<sup>D</sup> and PHYS 212<sup>D</sup> and (PHYS 213<sup>D</sup> or PHYS 201<sup>D</sup>) and PHYS 202<sup>D</sup> and (MATH 225<sup>D</sup> or MATH 230<sup>D</sup> or MATH 231<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**PHYS 385 - Computational Physics**

An introduction to scientific computational methods and their application in physics. A range of numerical and symbolic computing techniques will be explored, including numerical integration, matrix methods, differential equations, random walks, and Monte Carlo simulations. These techniques together with visualization methods will be used to solve problems taken from different physics topics, such as classical mechanics, electricity and magnetism, thermodynamics, quantum mechanics, and biophysics.

Prerequisites: PHYS 213<sup>D</sup> and MATH 240<sup>D</sup> and CPSC 140<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 410 - Electricity and Magnetism**

Electric fields and potentials of charge distributions and polarized materials, magnetic fields and vector potentials of current distributions and magnetized materials; electric and magnetic energies and application of Maxwell's equations.

Prerequisites: PHYS 212<sup>D</sup> and PHYS 331<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 412 - Modern Physics 2**

This course explores the applications of Quantum mechanics and relativity. Topics covered will include atomic physics, quantum statistics, solid state physics, nuclear physics, astrophysics and cosmology.

Prerequisites: PHYS 312<sup>D</sup> and MATH 231<sup>D</sup> and PHYS 331 (may be taken concurrently)<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 421 - Materials Safety and Equipment Overview for Nanofabrication - NMT 311**

This course provides an overview of basic nanofabrication processing equipment and materials handling procedures with a focus on safety, environment, and health issues. Topics covered include: cleanroom operation, environmental, safety, and health issues, vacuum pump systems operation, environmental safety and health issues (covering direct drive mechanical, roots blowers, turbomolecular, and dry mechanical systems); thermal- processing equipment operation, safety, environmental, and health issues (covering horizontal, vertical, rapid thermal annealing tools); chemical vapor deposition system operation, safety, environmental, and health issues (covering gas delivery, corrosive and flammable gas storage and plumbing, regulators, and mass flow controllers); and vacuum deposition/etching system operation, safety, environment, and health issues (covering microwave and RF power supplies and tuners, heating and cooling units, vacuum gauges, valves, and process controllers). Specific materials handling issues include those arising from using deionization water, solvents, cleansers, organic materials, ion implementation sources, diffusion sources, photoresists, developers, metal dielectrics and toxic, flammable, corrosive and high purity gases as well as packaging materials.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 422 - Basic Nanofabrication Processes - NMT 312**

The course provides an overview of basic processing steps used in all applications of nanofabrication. Both top-down and bottom-up nanofabrication are included. The majority of the course details a step-by-step description of the equipment and processes needed to fabricate devices and structures such as bio- chips, CMOS transistors, power devices, microelectromechanical (MEM) devices, and opto-electronic structures. Students learn the similarities and differences in both the equipment and process flows needed in fabricating all of these various structures.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 423 - Thin Films in Nanofabrication - NMT 313**

This course covers thin film deposition and etching practices in nanofabrication. The deposition techniques addressed in the first part of the course include atmospheric, low pressure, and plasma enhanced chemical vapor deposition and sputtering, thermal evaporation, and beam evaporation physical vapor deposition. Also included are self-assembling molecule based techniques. Materials considered include organics, dielectrics (e.g., nitrides, oxides), polysilicon (doped and undoped), metals (e.g., aluminum, tungsten, copper), adhesion promoters and diffusion barriers. The second part of the course focuses on etching processes and emphasizes reactive ion etching (single wafer, batch), high-ion-density reactors, ion beam etching and wet chemical etching. Students receive hands-on experience in depositing and etching dielectric, semiconductor, and metal materials using state-of-the-art tools and experience practicing the steps critical to micro- and nanofabrication of structures used in a variety of fields from biotechnology and the biomedical fields to microelectronics.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 424 - Advanced Lithography and Dielectrics Nanofabrication - NMT 314**

This course covers all aspects of lithography from design and mask fabrication to pattern transfer and inspection. The course is divided into three major sections. The first section describes the lithographic process from substrate preparation to exposure. The second section examines the processes from development through inspection (both before and after pattern transfer). This section introduces optical masks, aligners, steppers and scanners. In addition, critical dimension (CD) and profile control of photoresists are investigated. The last section discusses advances in optical lithographic techniques such as phase shifting masks and illumination schemes as well as molecular ruler, e-beam, x-ray, EUV, and ion beam lithography.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 425 - Materials Modification in Nanofabrication - NMT 315**

This course covers in detail the processing steps used in modifying material properties in nanofabrication. Included are chemical reaction, growth and annealing processes. The impact of thermal processing and thermal processing on defects, gettering, and impurities and overall electrical, mechanical, optical, and chemical properties are studied. The student grows and measures gate and field oxides, implants and activates source and drain regions, and evaluates thermal budget requirements using state-of-the-art tools. Included also are other modification technologies such as ion implantation, diffusion and chemical surface preparation and treatment. Substrate preparation processing such as slicing, etching, polishing and epitaxial growth are also covered.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 426 - Characterization, Packaging and Testing of Nanofabrication Structures - NMT 316**

This course examines a variety of measurements and techniques essential for controlling micro- and nanofabrication processes. Monitoring techniques such as residual gas analysis (RGA), optical emission spectroscopy (OES) and end point detection are discussed. Characterization techniques such as scanning electron microscopy x-ray photoelectron spectroscopy, atomic probe methods advanced optical microscopy, optical thin film measurements, ellipsometry, and resistivity/conductivity measurements are introduced and tied to process control. Basic measurements for yield analysis and process control are also stressed. These include breakdown measurements, junction testing, and capacitance-voltage and current voltage characterization. In addition, the characteristics of some simple bio-chip structures and MEMs devices are obtained and discussed. The student learns about the manufacturing issues involved in interconnects, materials compatibility and final device assembly. Aluminum, refractory metals and plastic fabrication techniques and characterization are discussed in detail along with topics such as diffusion barriers, contact resistance, electro migration, corrosion, and adhesion. The importance of planarization techniques such as deposition/etchback and chemical/mechanical polishing are emphasized. Lastly, procedures such as die separation, bonding, and sealing and final test for both conventional Cs and MEMs and biomedical devices are examined.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 450 - Internship**

Supervised placement and research in selected public and private agencies.

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

**PHYS 480 - Quantum**

In this introductory course in quantum mechanics, the foundations and origins will be covered. Other topics will include wave packets, the uncertainty principle, the Schroedinger equation, operator formalism, eigen functions, spherically symmetric systems, angular momentum, spin and scattering theory.

Prerequisites: PHYS 331<sup>D</sup> and PHYS 411<sup>D</sup> and MATH 240<sup>D</sup> and MATH 301<sup>\*D</sup> (may be taken concurrently).

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 490 - Independent Study**

Investigation of the theoretical or experimental area following a plan or proposal initiated by the student and approved by the major advisor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PHYS 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Political Science (POLS)

**POLS 101 - American National Government**

A survey of American national politics, emphasis on the constitution, parties, interest groups, elections, organization and structure of government.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

**POLS 103 - International Relations**

An overview of the politics of various governments; the nature of relations among nations; a study of problems such as terrorism and multinationals as political participants.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Citizenship & Social Problems, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

**POLS 110 - Foundations of Political Science**

This course introduces students to contemporary political problems and how political scientists think about those problems. Students will learn the language of political science including the big themes, concepts, and models that span centuries of political science literature and provide insight into global and domestic political conflict. Students will use the lens of political science to explore concepts such as liberty, equality, justice, rights, individual autonomy, democracy and representation, identity and tolerance, the appropriate role and limits of government, and sovereignty of states in the international system. Although non-democratic forms of governance will be examined, this course will focus on democratic governance - why we chose it, what political practices and reforms can improve it, and how citizens through engagement and dialogue can help to strengthen it. This course will emphasize the relevance of the core concepts of political science in relation to important contested political issues in the US and the global community today.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course

**POLS 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**POLS 170 - Investigating Politics**

This course guides students through the methods of social science inquiry by exploring major problems facing modern societies on the local, national, and/or global levels. Students will use the scientific process to learn how we know and what we know about the social world. Students will learn basic research concepts, explore the use of theories and models to guide research, and develop and use social science to become knowledgeable citizens and critical consumers of political news and information. Students will also learn how social science differs from natural science in its attention to normative and ethical questions and the role of power dynamics in shaping social, economic and political outcomes.

Credits: 3

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**POLS 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**POLS 195 - Workshop**

Special topics of interest to undergraduates and selected members of the community. A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**POLS 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**POLS 200 - State and Local Government**

Examines state levels of government. Emphasis is on constitutions, parties and interest groups, elections, organization and structure of government.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

**POLS 215 - Introduction to Political Theory**

An introduction to classical and modern theories of politics, governments and ideologies.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Thematic Thread(s): Citizenship & Social Problems, Institutions & Human Innovations, Transfer Thread Completion Course

**POLS 220 - Foreign Policy**

The study of selected instruments of foreign policy, how it is formulated and implemented; the focus is on the U.S.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course, United States in Global Context



**POLS 223 - Law and Courts**

An introductory examination of the structure of the judicial branch of government; what we mean when we talk about the "law"; how our understanding of what is law has developed and changed throughout our history; how our state and federal courts are administered and structured; the nature of legal education; the work of the Supreme Court, judges, and lawyers; how the criminal justice system chooses juries, tries defendants, negotiates justice through plea bargaining, and depends on its judiciary; and the role of the legal system in resolving private disputes.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Thematic Thread(s): Citizenship & Social Problems, Institutions & Human Innovations, Transfer Thread Completion Course

**POLS 235 - Civil Discourse and Democracy**

This course is an introduction to civil discourse, or the practice of constructive dialogues and deliberation, based in mutual respect, which ultimately seeks to advance the public interest. Students will use the lens of political science to explore contemporary political problems and how to approach, discuss, and analyze them.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**POLS 255 - Introduction to Public Policy**

This course introduces students to the idea that private actions create problems for communities that citizens and community leaders must work together to solve. Students learn a universal framework for overcoming community problems as well as the skills needed to recognize the moral and democratic dilemmas inherent in these problems. Students hone their knowledge by gathering evidence, researching, and addressing real community issues.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course

**POLS 263 - Introduction to Comparative Politics**

The stress is on descriptions and conceptions of the state and political institutions in the non-Western and Western worlds; with attention on policy-making, national issues, and systems.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Thematic Thread(s): Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

**POLS 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**POLS 295 - Workshop**

Special topics of interest to undergraduates and selected members of the community. A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**POLS 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**POLS 301 - Organized Political Action**

Political parties and interest groups provide crucial linkages between citizens and their government. This course will investigate the nature and origins of organized political groups in American politics, seeking to understand what it takes for political parties and interest groups, which are informal players of American politics, to survive, thrive, and develop a powerful voice in the national political dialogue. While the course focuses on American parties and interest groups, they will be explored in the global and comparative context.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 303 - Seminar in Democracy**

In response to waning public trust in American public institutions and democracy, it is imperative to understand how political systems fail. In this course, students will define democracy, discuss what happens when democracies break down, identify the causes of the breakdown, and find solutions to these problems. Students will also identify those characteristics and behaviors democracy requires of citizens for the system to work well.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course, United States in Global Context

**POLS 306 - Campaigns & Elections**

Elections are the cornerstone of democracy. Without free, fair and frequent elections, there is no popular governance. The United States holds more elections for more public offices and governments than any other nation in the world. The purpose of this course is to examine the key issues, questions, and controversies surrounding campaigns and elections in the United States and compare to campaigns and elections held in other democracies around the world.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 310 - Research Methods**

An examination of the foundations of systematic research, techniques of data collection and methods of data analysis.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 321 - The Presidency**

The study and evaluation of executive leadership in modern governments; the roles, functions and types of presidential leaders.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 322 - The United Nations and International Law**

An examination of the development, structure, and operations of the United Nations system and the fundamentals of public international law.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 325 - The Congress**

The study of legislative structures, functions and organizations; focus on legislative elections, committees, and decision-making.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 327 - Public Opinion and Political Attitudes**

An examination of the nature, origins, and structures of political attitudes.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 328 - Assessing Public Opinion**

Many careers rely on individuals who have the capacity to create and implement public opinion surveys, and analyze the results of public opinion polls. Urban planning, public administration, and public policy professionals use surveys for program evaluation and democratic accountability, while lobbyists, nonprofit, campaign, and corporate government relations professionals use surveys for assessing public problems and the political environment. Students will gain experience building and fielding surveys that accurately assess public opinion, often while helping community stakeholders with real-world needs.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 329 - Political Learning**

The course examines the process by which the transmission of political values, attitudes, perceptions and behaviors are undertaken in different political systems.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 333 - The Political Film**

The Political Film will be presented as an expression of social concerns in our society. Individual films will be evaluated as vehicles, which can influence people by disseminating ideas, convey points of view and comment on matters of political controversy.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 349 - Utopian Experiments: Issues of Gender and Power**

This course will examine the various alternative plans for the intentional restructuring of society as exhibited in the works of utopian theorists.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 350 - Transnational Terrorism**

An examination of politics and practice of transnational terrorism, as well as alternative policy responses to transnational terrorism. Topics will include an overview of the history and theory of terrorism as a political tactic, the issues motivating its use by contemporary terrorist organizations, the structure and tactics of terrorist networks, and the connections between states, terrorist networks, and transnational organized crime.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 351 - Politics of Race**

This course is an exploration of the politics and policy issues that disproportionately affect racial and ethnic minorities in the United States. A key objective of this course is to help students understand how the past racial history of the US shapes political and policy outcomes in the US today across a range of issues including income and wealth, employment, education, health, housing, and criminal justice. Students in this course will think and write critically about how the US got to this point and how we can get out of this pattern of persistent racial disparities. Students will be challenged throughout the course to apply concepts of racial justice.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 354 - Seminar in Religion and Politics**

This course is intended to help students understand the variety of religious voices in American politics and to acquaint students with the significance and variability of religious influence on contemporary American political life, i.e. public policy and individual political choices. The term "religion" is defined broadly to include formal theological creeds as well as the social beliefs, organizations, and subcultures associated with various religious communities. The central goal of this course is to understand how religion affects politics (and vice versa). Specifically, the course will explore the effects of the diverse religious traditions in America on American political history, voting, lobbying, political mobilization, political culture, and international engagement. A sampling of questions to be addressed follows: What has been the relative impact of various religions on American politics? How do religious actors translate their values into action? In what ways is the impact of religion direct? Indirect? How does the nature of the environment (domestic and international) affect the ability of religious actors to wield influence?

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Thematic Thread(s): Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 356 - Gay and Lesbian Politics**

This course will seek to understand how and why the battle over gay rights has come to occupy such a prominent place in our society and what this battle tells us about politics more generally. Although the course is centered on the politics of gay rights in the American context, we will also compare the American experience to those of other nations.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Thematic Thread(s): Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 357 - Civil Liberties and Civil Rights**

A survey of current controversies regarding the rights and freedoms guaranteed to American citizens by the U.S. Constitution.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 359 - Policy Analysis and Evaluation**

An examination of the ethical, theoretical and practical issues associated with the application of analytic and evaluative techniques to selected public policy problems and programs.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 364 - Using Evidence to Solve Public Problems**

Public decision makers increasingly call for evidence-based solutions to public problems. In this course, students will learn to assess and use data and evidence to help solve community problems. These skills provide the foundation of government relations, public service, nonprofit, and other careers relying on data-driven decision-making.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Thematic Thread(s): Citizenship & Social Problems, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 365 - International Political Economy**

The in-depth analysis of the political relationships among nation-states.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 367 - National and International Security: Problems and Issues**

National security problems combine aspects of American government, international relations, game theory, and logistical problems derived from research development priorities, economics. The course introduces the major issues of our time such as arms control, disarmament, the nature of war, the reality of decision-making and various case studies.

Credits: 3

Thematic Thread(s): Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 369 - Politics of Developing Areas**

A developmental approach to the comparative study of the primary functions, structures and capabilities of various industrializing political systems such as India, China, Mexico, Brazil, Tanzania.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Thematic Thread(s): Conservation, Technology & Imagination, Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 370 - Latin American Politics and Development**

This is an interdisciplinary course designed to give students a broad understanding of the historical, contemporary social (including gender, race, ethnicity, religion, etc.), economic, and in particular, political forces that shape Latin America. A number of different perspectives will be utilized to understand and explain the current state of Latin American political and economic development.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 372 - Campaign Management & Strategy**

This course will provide a very practical, hands-on blueprint for students who wish to run effectively and successfully for public office, or for students who hope to be effective and successful campaign managers or staffers. This course will consider campaigning from the perspective of both the candidate and the campaign manager, with a focus on developing and implementing a comprehensive campaign strategy.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 375 - Women and Politics**

The course will examine the effect of socialization and the impact of culture on women, gender differences in patterns of political participation; legal, political and social rights of women; and the effects of the political system upon the lives of women and their families.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Thematic Thread(s): Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 385 - War and Political Violence**

This course surveys the multidisciplinary factors that give rise to acts of political violence, including inter-state war, civil war, genocide, and terrorism. Students will study theoretical perspectives, real-world examples, and a broad range of methodologies used to understand, evaluate, and respond to contemporary conflicts. There are no prerequisites.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 395 - workshop**

Special topics of interest to undergraduates and selected members of the community. A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 403 - Constitutional Law**

The case study and analysis of the development and growth of constitutions through judicial interpretation.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 444 - Capstone: Political Analysis**

An examination of the theoretical and practical issues associated with the application of analytic and evaluative techniques to selected political institutions, behaviors, or policies. Students will be assessed on their accomplishment of outcomes expected of Political Science graduates.

Prerequisite: POLS 310<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 450 - Internship**

Varies

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 451 - Harrisburg Internship**

Assignment as an intern with a governmental agency in the state capital in Harrisburg, Pa. Open to all students at Slippery Rock University.

Credits: 1-9

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 452 - Harrisburg Internship Project**

A research project developed by the intern and approved by the Harrisburg internship coordinator on some aspect of government activities or public policy.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 454 - Harrisburg Internship Seminar**

Weekly seminar composed of all interns in the program and taught by the Harrisburg internship coordinator. Speakers from state government will address the seminar and the seminar will participate in several exercises designed to increase skills in governmental processes.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 490 - Independent Study**

In-depth reading and research in an area of particular interest to the student, with the guidance of a faculty member. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 495 - Workshop**

Special topics of interest to undergraduates and selected members of the community. A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**POLS 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Psychology (PSYC)

**PSYC 105 - Introduction to Psychology**

This course serves as an introduction to the science of psychology. Psychological theory, concepts, and research spanning the breadth of the discipline are explored. Content will provide an introduction to research methods and ethics and include selected topics from each of the five domains of psychological inquiry: Biological, Cognitive, Developmental, Social and Personality, and Mental and Physical Health. Students will explore questions involving four themes that arise across the domains: Cultural and Social Diversity, Ethics, Variations in Human Functioning, and Applications. A grade of C or higher is required to remain in the major. Students may only repeat this course one time.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**PSYC 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**PSYC 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PSYC 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**PSYC 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed



**PSYC 205 - Environmental Psychology**

Man's interference with the environment, including over-population, isolation, social institutions as environments, noise, housing, community design, behavioral effects of pollutants and behavior genetics.

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

**PSYC 208 - Personality**

Review of the major historical and contemporary theoretical approaches to the study of personality, including their antecedents, underlying assumptions, research/evidential basis, influence on the field and relevance to the theory and practice of psychology.

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course

**PSYC 221 - Introduction to Behavioral Statistics**

Introduction to descriptive and inferential statistics used in evaluation and reporting of behavioral research.

Prerequisites: PSYC 105<sup>C</sup> and (MATH 152<sup>C</sup> or STAT 152<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Enrollment is limited to students with a program in Psychology, Psychology, Psychology-Developmental, Psychology-Neuroscience or Psychology-Pre PA-SRU 3+2.

**PSYC 231 - Psychological Science I: Research Methods**

This project-based course introduces students to research methods and designs used in psychology. The course prepares students to evaluate published reports of psychological research and to design and conduct research studies in Psychology. Each student will apply concepts learned in a class to design and write a formal research proposal of an original experiment, which will be written in APA style.

Prerequisites: PSYC 105<sup>C</sup> and (MATH 152<sup>C</sup> or STAT 152<sup>C</sup>) and ENGL 102<sup>C</sup> and (INDS 110<sup>C</sup> or LIBR 110<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment is limited to students with a program in Psychology, Psychology, Psychology-Developmental or Psychology-Neuroscience.

**PSYC 232 - Psychological Science II: Statistical Applications**

This is a project-based course in which students apply knowledge of descriptive and inferential statistics to answer research questions in psychology. Topics include selection of appropriate descriptive and inferential statistics to use with descriptive, correlational, predictive, and experimental designs; planning statistical analysis; using statistical software to organize data and conduct analyses; interpreting results, and writing formal reports of research in APA style. Students will apply knowledge and skills learned in the course to write an APA style lab report of a quantitative study.

Prerequisites: PSYC 105<sup>C</sup> and ENGL 102<sup>C</sup> and (MATH 152<sup>C</sup> or STAT 152<sup>C</sup>) and (INDS 110<sup>C</sup> or LIBR 110) and PSYC 231<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Requires minimum grade of .

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment is limited to students with a program in Psychology, Psychology, Psychology-Developmental or Psychology-Neuroscience.

**PSYC 233 - Sensation & Perception**

This combined lecture and lab covers the basic anatomy, physiology and role of the sensory systems in perception and sensation.

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

**PSYC 240 - Human Sexual Behavior**

Examines personal sociocultural factors in sexual functioning. Motivational, developmental, personality and clinical implications are explored.

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Cultural Literacy & Community Building, Institutions & Human Innovations, Transfer Thread Completion Course

**PSYC 244 - Developmental Psychology**

Human development from conception to senescence with emphasis on the theoretical and practical implications.

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**PSYC 276 - Introduction to Abnormal Psychology**

Introduction to the field of abnormal behavior, including DSM classification and examination of major categories of mental disorders.

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Transfer Thread Completion Course

**PSYC 289 - Positive Psychology**

In this course, students will explore human flourishing - defined as a life of deep meaning, fulfillment and service to others. Students will be taught about human flourishing through the lens of science and their own experience. Through exposure to diverse scientific theories and research on the skills associated with flourishing and to a variety of reflective and applied practice, and laboratory experiences, students will develop conceptual knowledge, experiential insight, and practical skills related to living a "good life".

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Cultural Literacy & Community Building, Transfer Thread Completion Course

**PSYC 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PSYC 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**PSYC 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**PSYC 300 - Psychology of Women, Gender and Culture**

Overview of psychological perspectives and current research concerning the field of the psychology of women and gender. Topics related to the role of culture in the social construction of gender will be emphasized.

Topics include similarities and differences between women and men, gender development, emotions, relationships, sexuality, education and work, health and fitness, psychological distress, and social roles. CAPP

Prerequisites: A grade of C or higher in PSYC 105 or any gender studies course or permission from the instructor.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 302 - Psychology of Criminal Behavior**

The study of how individual criminal behavior is acquired, evoked, maintained and modified.

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 303 - Learning**

This lecture/lab course will facilitate a deeper understanding of the basic mechanisms of learning, which are expressed as changes in behavior that are altered by experience.

Prerequisite: PSYC 231<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 4

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 304 - Theories of Counseling**

This course will examine the major approaches to psychotherapy through critical review of the theoretical assumptions, historical influences, process and outcome research, techniques of intervention and relevant context for the major theoretical paradigms. Professional and ethical issues, contemporary topics and issues of fundamental conceptualization skill development will be addressed. This course does not prepare students to function as counselors; rather it is designed to provide meaningful preparation for pursuit of post-Baccalaureate training.

Prerequisites: PSYC 208<sup>D</sup> and PSYC 276<sup>D</sup> and PSYC 105<sup>C</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 306 - Introduction to Psychological Testing**

Includes the historical, theoretical and statistical foundations of testing; exposure to ability (aptitude, achievement and intelligence) and personality tests; and the settings in which psychologists administer these tests.

Prerequisites: PSYC 105<sup>C</sup> and (PSYC 221<sup>C</sup> or PSYC 232<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 310 - Introduction to Industrial-Organizational Psychology**

The application of psychological theory, techniques, and research to business, industry, and other organizational behavior. Subjects include employee recruitment and selection, retention and promotion; job satisfaction; job evaluation/performance measures; training; motivation; stress; and human factors.

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 311 - Introduction to Behavioral Neuroscience**

This lecture/lab course will help you to develop knowledge of the biological basis of human behavior and learn to design and conduct research to study brain structure, function, and behavior. Topics may include neuroanatomy, neural communication, development of the nervous system, genetics, sensory and motor systems, emotion, learning and memory, language, sexual behavior, consciousness and neurological and psychological disorders.

Prerequisite: PSYC 232<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 4

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with department of Psychology.

**PSYC 315 - Psychology of Sexual and Gender Diversity**

Overview of psychological perspectives and current research concerning the field of lesbian, gay, bisexual, transgender and queer psychology. The course takes a life-span developmental perspective and examines the diversity of gender and sexual identities. Topics include theories of sexual orientation and gender identity, oppression and discrimination, history of the Queer community and the coming out process. CAPP  
Prerequisites: A grade of C or higher in PSYC 105 or any gender studies course or permission from the instructor.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 318 - Psychopathology of Childhood and Adolescence**

An overview of clinical practice with children, adolescents and their families with advanced study of the emergence, diagnosis and treatment of psychological disorders in children and adolescents. Coursework includes theories of normal and abnormal child development, etiology of disorders, current DSM diagnosis, and an overview of assessment and intervention methods relevant to children and adolescents.

Prerequisites: PSYC 105<sup>C</sup> and PSYC 276<sup>D</sup> and PSYC 244<sup>D</sup>

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 320 - Introduction to Clinical Psychology**

Introduction to the field of clinical psychology. Includes an overview of training, similarities, and differences among various mental health service providers. Students will be introduced to interviewing skills, approaches to psychotherapy, assessment, treatment planning, and areas of specialization and application within the field. Emphasis is placed on consideration of issues that tend to arise when working with individuals from diverse backgrounds, including differences in racial and ethnic background, sex and gender, age, sexual orientation, religious background, and those with mental and physical disabilities.

Prerequisites: PSYC 105<sup>C</sup> and (PSYC 221<sup>C</sup> or PSYC 232<sup>C</sup>) and (PSYC 325<sup>C</sup> and PSYC 326<sup>C</sup> or PSYC 231<sup>C</sup>) and PSYC 276<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 321 - Drugs and Behavior**

Psychoactive drugs and their action on the human nervous system; legal and sociocultural aspects of drug abuse.

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Psychology,

Psychology, Psychology-Developmental, Psychology-Neuroscience or Psychology-Pre PA-SRU 3+2.

**PSYC 325 - Introduction to Experimental Psychology**

This course will teach students how to design, conduct, and report psychological research. Topics include the nature of science, formulation of hypotheses, research methods and design, and ethical issues in using human and nonhuman subjects. Emphasis will be given to experimental design techniques, evaluation of published research in psychology, and the writing of research reports. The course will also focus on the teaching of library research skills and producing formal research reports in APA manuscript style

Prerequisites: INDS 110<sup>D</sup> and ENGL 102<sup>C</sup> and PSYC 105<sup>C</sup> and PSYC 221<sup>C</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Corequisite(s): PSYC 326

Credits: 3

Students with a semester level of Freshman 1 or Freshman 2 may **not** enroll.

Enrollment is limited to students with a program in Psychology, Psychology, Psychology-Developmental, Psychology-Neuroscience or Psychology-Pre PA-SRU 3+2.

**PSYC 326 - Experimental Psychology Laboratory**

A laboratory experience to accompany PSYC 325 in which students will conduct a series of literature searches, design and execute laboratory experiments, perform and interpret statistical analyses of data collected, and report experimental findings in APA style.

Prerequisites: PSYC 105<sup>C</sup> and PSYC 221<sup>C</sup> and INDS 110<sup>D</sup> and ENGL 102<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): PSYC 325

Credits: 1

Students with a semester level of Freshman 1 or Freshman 2 may **not** enroll.

Enrollment is limited to students with a program in Psychology, Psychology, Psychology-Developmental, Psychology-Neuroscience or Psychology-Pre PA-SRU 3+2.

**PSYC 334 - Health Psychology**

An overview of the field and of the role of psychology in health. Topics include health-enhancing and health-compromising behaviors; the effects of stress, coping, and personality on health; psychoneuroimmunology; treatments of specific problems and disorders; and interacting with health care services.

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Human Diversity & Well-Being, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 338 - Cognitive Psychology**

A survey of theories and facts related to complex information processing and conscious experience in humans. Topics covered will include attention, memory, problem solving, symbolic processes and human consciousness.

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 350 - Contemporary Topics in Psychological Science**

Contemporary topics in Psychology are critically examined. Specific topics will vary within the major subfields of Psychology: Clinical/Counseling; Cognitive; Developmental; Environmental; Experimental/Quantitative; Forensic; Gender/Sexual Identity; Health; Industrial-Organizational; Multicultural; Neuroscience; Positive; Rehabilitation; Social; Sport/Performance.

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Psychology.

**PSYC 355 - Topical Seminar in Neuroscience**

Topical Seminar in Neuroscience will focus on reading, evaluating, and presenting primary literature. This course will provide students with an opportunity to read and discuss primary literature related to Neuroscience. Through reading and discussing primary literature students in this course will explore a breadth of career paths and neuroscience techniques while developing methodological and content knowledge in the foundations of neuroscience, and will gain skills in the ability to critically evaluate primary literature. Students may repeat the course once for credit.

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 360 - History of Psychology**

A review of the philosophical and natural science antecedents to the science of psychology and the development of psychological paradigms from our origins to the present, including attention to the interactive influence of world events/psychology. The historical perspective allows students to understand the relationships between different fields in psychology.

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**PSYC 364 - Child and Adolescent Development**

Intensive study of the biosocial, cognitive, and psychosocial aspects of development of children and adolescents.

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Cultural Literacy & Community Building, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 365 - Psychology of Aging**

Psychosocial, clinical and developmental aspects of aging, implications of optimal developmental and effective management of problems confronting the aged.

Prerequisites: PSYC 105<sup>C</sup> and (PSYC 325<sup>C</sup> and PSYC 326<sup>C</sup>) or (PSYC 232<sup>C</sup> and PSYC 231<sup>C</sup>) and (PSYC 344<sup>C</sup> or PSYC 244<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 375 - Psychopathology of Adulthood**

Advanced study of adult mental disorders, including symptoms, phenomenological aspects, diagnosis, and treatment. Students will examine the etiology, symptom constellations, and treatment of psychological disorders in depth and begin to understand what people with the disorders experience through various stages of adulthood. Psychological theory and research findings will guide the student in gaining an understanding of mental illness.

Prerequisites: PSYC 105<sup>C</sup> and PSYC 244<sup>D</sup> and PSYC 276<sup>D</sup>

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Psychology, Psychology, Psychology-Developmental or Psychology-Neuroscience.

**PSYC 377 - Social Psychology**

The psychological implications of our social existence; a study of the social forces affecting human behavior.

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 392 - Cross Cultural Psychology**

This course will introduce and familiarize students with the concept of cross-cultural psychology by examining the extent to which the theories, principles, and knowledge of the discipline of psychology are universally applicable to humans. The goal of exploring the psychological implications of cultural differences and of contact among members of different cultures is to consider the role which psychological research and theory can play in advancing intercultural understanding.

Prerequisites: PSYC 105<sup>C</sup> and PSYC 377<sup>D</sup>

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 415 - Multicultural Identity Development**

This course examines biological, psychological and social influences on identity formation through the lifespan with a focus on intersectionality of identities such as race, gender, sexual orientation, class and disability.

Prerequisites: PSYC 105<sup>C</sup> and (PSYC 344<sup>C</sup> or PSYC 244<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 420 - Community Service Practicum in Psychology**

160 hours of documented, relevant volunteer placement in an approved public, not for profit, or private agency. A formal paper related to the experience is required to assist the student with meaningful integration of the experience. Notes: Course grading: Pass/No Credit. Prerequisites: Declared major; Jr/Sr standing; minimum 2.5 GPA in major, 2.0 GPA overall; a grade of C or higher in PSYC 105, PSYC 231, and PSYC 232; at least 12 additional credits in Psychology; written application and departmental permission.

Prerequisites: PSYC 105<sup>C</sup> and PSYC 232<sup>C</sup> and PSYC 231<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**PSYC 421 - Advanced Behavioral Statistics**

Intermediate forms of statistical analysis of behavioral research, their rationale, and computer applications are introduced.

Prerequisites: PSYC 105<sup>C</sup> and PSYC 221<sup>C</sup> and PSYC 325<sup>C</sup> and PSYC 326<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 428 - Social and Emotional Development Across the Lifespan**

This course uses a lifespan theoretical perspective to examine social and emotional influences on social relationships (e.g., parent-child, sibling, grandparent-grandchild, romantic) with an emphasis on the socio-historical context and the influence of intersecting identity factors (e.g., age and race).

Prerequisites: PSYC 105<sup>C</sup> and (PSYC 244<sup>C</sup> or PSYC 344<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Psychology, Psychology, Psychology-Developmental or Psychology-Neuroscience.



**PSYC 430 - Research Practicum in Psychology**

Supervised research experience with Psychology department faculty member. Students identify a mentor and work together with their mentor to develop and implement a research plan, and write an APA style paper reporting the results. Notes: Course grading: Pass/No Credit. Prerequisites: Declared major; Jr/Sr standing; minimum overall and Psychology GPA of 3.0; a grade of C or higher in PSYC 105, PSYC 231 and PSYC 232; at least 12 additional credits in Psychology; written application and departmental permission.

Prerequisites: PSYC 105<sup>C</sup> and PSYC 232<sup>C</sup> and PSYC 231<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**PSYC 445 - Infant and Child Cognition**

This course examines theories and research in cognitive development with an emphasis on infancy and early childhood. Piagetian, Vygotskian, Information-processing, and Dynamic Systems Approaches are explored while examining the development of processes including attention, perception, memory, language, and reasoning. In addition to learning about theories and research findings in the field, students will (1) become familiar with the research methods employed by psychologists to study cognitive development; (2) think critically about current cognitive developmental questions; and (3) apply cognitive developmental findings to real world contexts.

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 449 - Seminar in Psychology**

Advanced topics will be announced in the schedule.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 450 - Field Placement Internship in Psychology**

Supervised placement in selected public and private agencies at appropriate institutions. Students are required to co-register for Senior Integration Seminar (PSYC 485) in order to synthesize the experience. Notes: Course grading: Pass/No Credit. Prerequisites: Declared major; Jr/Sr standing; minimum Overall GPA of 2.0 and Psychology GPA of 2.5; a grade of C or higher in PSYC 105, PSYC 231; and PSYC 232; at least 15 additional credits in Psychology; written application and departmental permission. Corequisite: PSYC 485.

Prerequisites: PSYC 105<sup>C</sup> and PSYC 232<sup>C</sup> and PSYC 231<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Corequisite(s): PSYC 485

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

Enrollment limited to students with department of Psychology.

**PSYC 451 - Research Capstone Internship**

This course is designed to provide an immersion experience in undergraduate research in laboratory or clinical settings. Under supervision of a SRU psychology faculty member, the student will integrate concepts gleaned from prerequisite undergraduate courses and scientific knowledge. Psychology theory, research methods, and statistical applications will be applied to prepare students who are planning to pursue careers in research in psychology related fields or to further their education in graduate programs in all psychology related fields, neuroscience, and professional programs such as physician assistant, occupational therapy, and medical schools. Notes: Declared major; Jr/Sr standing; minimum Overall GPA of 2.0 and Psychology GPA of 3.0; a grade of C or higher in: PSYC 105 and (PSYC 231 or (PSYC 325 and PSYC 326)) and (PSYC 232 or PSYC 221); written application and departmental permission. (repeatable up to 12 credits)

Prerequisites: PSYC 105<sup>C</sup> and (PSYC 231<sup>C</sup> or (PSYC 325<sup>C</sup> and PSYC 326<sup>C</sup>)) and (PSYC 232<sup>C</sup> or PSYC 221<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3-6

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

Enrollment is limited to students with a program in Psychology-Developmental or Psychology-Neuroscience.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**PSYC 471 - Psychopharmacology**

This combined lecture and laboratory course will provide a basic introduction to psychopharmacology: the study of the effects of drugs on the brain and human behavior. Emphasis will be on drugs that effect the central nervous system and treat mental health disorders.

Prerequisite: PSYC 311<sup>B</sup>

<sup>B</sup> Requires minimum grade of B.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 473 - Hormones and Behavior**

This combined lecture and laboratory course will provide an in-depth exploration of the study of hormones and behavior, introduce students to methodologies used to study hormones and behavior, and explore the evolutionary, behavioral and social influences that can change the expression of hormones and the resulting behavioral consequences.

Prerequisite: PSYC 311<sup>B</sup>

<sup>B</sup> Requires minimum grade of B.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 475 - Behavior Modification**

Application of learning and other psychological principles in behavior therapy.

Prerequisite: PSYC 105<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 476 - Clinical Neuroscience**

This course surveys the role of neural mechanisms on the development, diagnosis and treatment of psychological disorders. The biological basis of neurological and psychiatric disorders will be explored using integrative approach that includes genetics, neuroanatomy, chemistry and physiology, development, environment, behavior, culture and evolution.

Prerequisites: PSYC 276<sup>C</sup> and (PSYC 325<sup>C</sup> and PSYC 326<sup>C</sup>) or (PSYC 231<sup>C</sup> and PSYC 232<sup>C</sup>) and PSYC 311<sup>B</sup> and PSYC 312<sup>B</sup>

<sup>C</sup> Requires minimum grade of C.

<sup>B</sup> Requires minimum grade of B.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with department of Psychology.

**PSYC 477 - Developmental Neuroscience**

This course explores the biology of behavioral development and the integration of organismic and environmental process that regulate the development of the brain and behavior. Topics will include phases of ontogeny including prenatal, perinatal, early childhood, adolescent, adult and aging brain development, sensitive and critical periods, the role of environment, genetics and child-parent interactions on brain development and implications of neuroscience research on assessment and intervention.

Prerequisites: PSYC 276<sup>C</sup> and (PSYC 325<sup>C</sup> and PSYC 326<sup>C</sup>) or (PSYC 231<sup>C</sup> and PSYC 232<sup>C</sup>) and (PSYC 344<sup>C</sup> or PSYC 244<sup>C</sup>) and PSYC 311<sup>B</sup>

<sup>C</sup> Requires minimum grade of C.

<sup>B</sup> Requires minimum grade of B.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with department of Psychology.

**PSYC 480 - Behavior Management**

Principles, methods and ethics of behavior management in community, industrial and/or congregate facilities.

Prerequisites: PSYC 105<sup>C</sup> and PSYC 303<sup>D</sup>

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 485 - Senior Integration Seminar**

This course integrates knowledge and skills acquired through the psychology curriculum and during the Field Placement Internship in Psychology with didactic experiences that facilitate learning and synthesis of information. Students are required to be co-enrolled with Field Placement Internship in Psychology (PSYC 450).

Prerequisites: PSYC 105<sup>C</sup> and (PSYC 221<sup>C</sup> or PSYC 232<sup>C</sup>) and (PSYC 325<sup>C</sup> and PSYC 326<sup>C</sup> or PSYC 231<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment is limited to students with a program in Psychology, Psychology, Psychology-Developmental, Psychology-Neuroscience or Psychology-Pre PA-SRU 3+2.

Enrollment limited to students with the SPECIAL APPROVAL attribute.

**PSYC 490 - Independent Study**

Propose and complete a supervised project, either historical, theoretical or experimental. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**PSYC 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

# Recreational Therapy (RCTH)

## **RCTH 120 - Disability, Community Inclusion, and Diversity**

This course is designed to introduce the student to inclusive leisure services. The course reviews attitudes regarding people with disabilities, barriers to inclusion, enabling terminology, and legislative initiatives, which promote inclusion. The ADA will be highlighted along with information on various disabling conditions. The goal of this course is to facilitate an increased awareness of people with disabilities and considerations for providing inclusive services.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course

## **RCTH 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

## **RCTH 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## **RCTH 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

## **RCTH 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## **RCTH 220 - Recreational Therapy Services**

Introduces students to the general field of recreational therapy and provides an introduction to various disabilities and how the RT process applies.

Prerequisites: PREE 120<sup>D</sup> or RCTH 120<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

## **RCTH 232 - Recreational Therapy for People with Physical Disabilities**

This course will provide information on various physical disabilities and the potential application of Recreational Therapy services with individuals with physical disabilities. The incidence, prevalence, etiology and treatment for each disability will be presented along with implications for RT practice.

Prerequisites: PREE 120<sup>D</sup> or RCTH 120<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

## **RCTH 233 - Recreational Therapy for People with Psychosocial and Mental Disorders**

This course will provide information on various mental health impairments and addictive and social disorders. The incidence, prevalence, etiology and treatment for each condition will be presented along with implications for Recreational Therapy practice.

Prerequisites: PREE 120<sup>D</sup> or RCTH 120<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

## **RCTH 252 - Equine Assisted Activities and Therapies**

An introduction to equine assisted activities including basic safety skills, lesson preparation, benefits for individuals with disabilities, tack/equine selection, and certification procedures. Students will gain practical experience through riding horses and assisting individuals with disabilities during lessons.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

## **RCTH 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## **RCTH 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

## **RCTH 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**RCTH 305 - Animal-Assisted Therapy for Diverse Populations & Settings**

This course is designed to provide students with an overview of the various populations that can potentially benefit from Animal-Assisted Interventions (AAI) and Animal-Assisted Therapy (AAT). The focus will be on how these potential benefits of AAT can be incorporated into various settings of service. Students will learn the different approaches to using animals as a partner in facilitating therapeutic outcomes. Students will be exposed to research evidence that supports AAT with populations generally served by health and human services areas. The design of program/treatment plans to facilitate outcomes will be incorporated into the course as well as practical application of AAT.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Animal-Assisted Interventions.

**RCTH 314 - Clinical Aspects of Recreational Therapy**

This course provides a more in-depth look at Recreational Therapy including professional standards of practice, health care accreditation, documentation methods and application of activity analysis in treatment planning. Lab experiences are incorporated into the course.

Prerequisites: PREE 220<sup>D</sup> or RCTH 220<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RCTH 317 - Organization and Management of Recreational Therapy Practice**

This course is designed to provide recreational therapy (RT) majors with the knowledge and skills required to effectively supervise and manage resources within various health and human service settings. Emphasis is placed on accreditation standards, legislative and regulatory requirements, public relations and marketing, strategic planning and decision making, quality improvement and risk management practices, fiscal planning and budgeting and human resource management.

Prerequisites: PREE 220<sup>C</sup> or RCTH 220<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Therapeutic Recreation Serv, Recreational Therapy or Therapeutic Recreation.

**RCTH 319 - Client Assessment in Recreational Therapy**

This course designed to facilitate the development of student knowledge and skills related to the RT assessment process. The course will expose students to information and activities to enhance understanding of the importance of assessment, the various domains of assessment and the various techniques used in the assessment process. Skills will be developed in the areas of selecting and designing assessments, interviewing clients, observing behaviors and documenting assessment results.

Prerequisites: (PREE 220<sup>D</sup> or RCTH 220<sup>D</sup>) and (PREE 229<sup>D</sup> or PREE 314<sup>D</sup> or RCTH 314<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RCTH 320 - Recreational Therapy Program Design**

This course focuses on techniques of recreational therapy program planning including assessment, treatment planning, implementation and evaluation. Students will implement interventions using various leadership strategies to meet the needs of persons with disabilities and disorders and the document results. A lab experience is included in this course.

Prerequisites: (PREE 220<sup>D</sup> or RCTH 220<sup>D</sup>) and (PREE 229<sup>D</sup> or PREE 314<sup>D</sup> or RCTH 314<sup>D</sup>) and (PREE 319<sup>D</sup> or RCTH 319<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RCTH 351 - Recreational Therapy Practicum**

Observation and participation in an agency or program serving individuals with disabling conditions. Cross listed as RCTH352.

Credits: 3

Term(s) Typically Offered: Offered Summer & Winter Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RCTH 352 - Practicum in Therapeutic Recreation**

Observation and participation in an agency or program serving individuals with disabling condition. Cross listed as RCTH351.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**RCTH 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RCTH 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RCTH 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RCTH 415 - Challenges and Trends in Recreational Therapy**

An integrative course for detailed study of current issues in health care and human services with emphasis on unique and imaginative solutions to the challenges facing the recreational therapy profession. Must be a senior to enroll.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

**RCTH 420 - Recreational Therapy for Older Adults**

An overview of the aging process as it relates to recreational therapy service provision and leisure participation. Focus is on the developmental issues, including psychosocial, biological and economic issues in later life. The course reviews the various settings of service and care continuums available to serve the older adult populations. Legislative and regulatory influences regarding the provision of services to older adults will be discussed.

Prerequisites: (PREE 220<sup>D</sup> or RCTH 220<sup>D</sup>) and (PREE 120<sup>D</sup> or RCTH 120<sup>D</sup>)  
<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RCTH 422 - Recreational Therapy Interventions I**

An investigation of the historical, philosophical, psychological and educational foundations of leisure education and stress management at RT treatment modalities. The functions of leisure education, including a variety of instruments and techniques appropriate for a variety of publics, are examined. The functions of stress management treatments, as well as a variety of techniques appropriate for a variety of publics, is also examined.

Prerequisites: (PREE 220<sup>D</sup> or RCTH 220<sup>D</sup>) and (PREE 229<sup>D</sup> or PREE 314<sup>D</sup> or RCTH 314<sup>D</sup>) and (PREE 319<sup>D</sup> or RCTH 319<sup>D</sup>) and (PREE 320<sup>D</sup> or RCTH 320<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RCTH 423 - Recreational Therapy Interventions II**

This course will offer an overview of several different Recreational Therapy interventions and techniques, with emphasis on evidence-based practice specific to the areas of community reintegration and its many components, including areas such as social skills, mobility training, and money management (as examples).

Prerequisites: (PREE 220<sup>D</sup> or RCTH 220<sup>D</sup>) and (PREE 229<sup>D</sup> or PREE 314<sup>D</sup> or RCTH 314<sup>D</sup>) and (PREE 232<sup>D</sup> or RCTH 232<sup>D</sup>) and (PREE 233<sup>D</sup> or RCTH 233<sup>D</sup>) and (PREE 319<sup>D</sup> or RCTH 319<sup>D</sup>) and (PREE 320<sup>D</sup> or RCTH 320<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RCTH 450 - Internship**

A supervised off-campus work experience in an appropriate aspect of recreational therapy work. Open only to RCTH majors with advanced standing.

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RCTH 490 - Independent Study**

A special study opportunity for students to investigate in-depth, approved topics in recreation or environmental studies. Topic and credit established by student and supervising instructor. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RCTH 491 - Professional Seminar**

This course is designed to assist students in preparing for entry into the environmental education profession. Topics will include career planning, employment opportunities, employment seeking skills, and discussions centering on areas of interest to the student.

Credits: 1

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RCTH 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**RCTH 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Russian (RUSS)

**RUSS 101 - Russian Language and Culture I**

This course is the first in a three course series which will provide an introduction to the Russian language.

Credits: 3

Thematic Thread(s): Transfer Thread Completion Course

**RUSS 102 - Russian Language and Culture II**

This course is the second in a three course series which will provide an introduction to the Russian language.

Prerequisite: RUSS 101<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Thematic Thread(s): Transfer Thread Completion Course

**RUSS 103 - Russian Language and Culture III**

This course is the third in three course series which will provide an introduction to the Russian language.

Prerequisite: RUSS 102<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Thematic Thread(s): Transfer Thread Completion Course

**RUSS 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

**RUSS 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

**RUSS 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

**RUSS 201 - Third Crse Russian**

After a review of basic principles this course continues to develop understanding and skill in using more complex elements of the Russian language and in recognizing and mastering their use in both written and spoken form. Taught through distance education.

Credits: 3

**RUSS 202 - Intermediate Russian I**

Comprehensive review of Russian grammar with emphasis on developing the students' abilities for proficient oral and written accomplishments.

Prerequisite: RUSS 103<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

**RUSS 210 - Russian Literature in Translation**

A study of representative Russian literary works from its origins to 1917. Course is taught in English; no knowledge of Russian required.

Credits: 3

**RUSS 270 - Study in the Republic of Russia**

This course is designed for students who desire to study modern Russia first-hand. Students will study modern Russian economy, housing, the political system, history, and information on Russia while traveling in the Republic of Russia.

Prerequisite: ENGL 102<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1-3

**RUSS 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

**RUSS 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

**RUSS 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

**RUSS 301 - Advanced Russian 1**

A detailed course designed to give the student a valid structural knowledge of Russian. A study of the finer points of modern Russian usage.

Prerequisite: RUSS 202<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RUSS 302 - Advanced Russian 2**

An advanced course in the study of Russian grammar designed to improve vocabulary, idiomatic useage, reading skills, and individual style.

Prerequisite: RUSS 301<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RUSS 305 - Russian Civilization via Film**

A comprehensive analysis of Russian civilization through the media of Russian film. Russian films with subtitles present all major aspects of Russian civilization: the Tatar yoke, Russian expansion, the rise of Muscovy, the social-economic-political conflicts at various levels of tsarism, communication and post-communism. No prerequisite

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RUSS 306 - The Challenge of Russian Legacy**

A broad study of the social, political, historical, economic, and cultural situations of modern Russian from 1917 to the present. Course is offered in English and is open to all interested students.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RUSS 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RUSS 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RUSS 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RUSS 490 - Independent Study**

Students have an opportunity to study selected areas in greater concentration. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RUSS 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**RUSS 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Safety Management (SAFE)

**SAFE 118 - Introduction to Safety**

Examines basic safety practices, incident causal factors, and preventative measures.

Credits: 3

Term(s) Typically Offered: Offered Every Term

**SAFE 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**SAFE 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment is limited to students with a major in Safety Management.

**SAFE 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Enrollment is limited to students with a major in Safety Management.

**SAFE 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment is limited to students with a major in Safety Management.

**SAFE 205 - First Aid and Safety**

Emphasizes prevention, protection from further harm and correct response to common emergencies resulting from trauma and/or illness confronting the citizen. Provides opportunity to earn certification in American Red Cross First Aid and American Red Cross CPR or American Health Association CPR.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**SAFE 218 - Legislative Compliance-General Industry**

Examines workplace hazards as they relate to the Occupational Safety and Health Act and promulgated standards (Labor).

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 228 - Motor Transportation Fleet Safety**

Focuses on the essential elements of a comprehensive motor transportation fleet safety program as they relate to protecting and conserving enterprise resources.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment is limited to students with a program in Safety Management.

**SAFE 248 - Hazardous Materials & Waste Management**

Examines the recognition, evaluation, control, and legislative compliance of hazardous materials and waste through effective safety management.

Prerequisites: CHEM 104<sup>D</sup> or CHEM 107<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment is limited to students with a program in Safety Management.

**SAFE 258 - Construction Safety**

Safety requirements and responsibilities for the construction industry.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment is limited to students with a program in Safety Management.

**SAFE 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 318 - Principles of Industrial Hygiene**

Concentrates upon the recognition, evaluation and control of employee-related workplace health hazards. Course includes an instrumentation component.

Prerequisites: CHEM 104 (may be taken concurrently)<sup>D</sup> or CHEM 107<sup>\*D</sup> (may be taken concurrently).

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 319 - Principles of Industrial Hygiene II**

Concentrates upon the recognition, evaluation and control of employee-related workplace hazards. Course includes an instrumentation component. Courses is a continuation of SAFE 318.

Prerequisite: SAFE 318<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 328 - Comprehensive Emergency Management and Fire Services**

Examines comprehensive emergency management and fire services as they relate to preparing, preparing, protecting, and preserving resources.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 338 - Ergonomics and Human Factors**

Examines workplace design adversities as well as their remediation by the safety function.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 368 - Injury and Damage Incidents Evaluation**

Focuses on the investigation, analysis, and evaluation of injury and property damage incidents. Includes Workers' Compensation and insurance variations.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 378 - Energy Exploration and Generation**

This course examines the safety management of energy exploration and energy generation safety.

Prerequisites: SAFE 118<sup>D</sup> and SAFE 218<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Summer & Winter Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Safety Management.

**SAFE 385 - Safety Measurement, Evaluation, and Research**

This course introduces safety management students to applied safety research utilizing analysis of evaluative data and statistical procedures applicable to the safety field. The course includes discussions on databases, sampling techniques, and statistical and survey tools. This course will introduce students to data interpretation and how to prepare applied safety research documents.

Prerequisites: SAFE 118<sup>C</sup> and SAFE 218<sup>C</sup> and SAFE 258<sup>C</sup> and SAFE 318<sup>\*C</sup> and SAFE 319<sup>\*C</sup> and STAT 152 (may be taken concurrently)<sup>C</sup> (may be taken concurrently).

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1 or Senior 2.

Enrollment limited to students with department of Safety Management.

**SAFE 388 - Insurance Risk and Loss Control Management**

Examines Risk as it applies to Occupational Safety and Health in an evolving world with a focus on risk assessment and treatment through Insurance and Loss Control Management.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Senior 1, Senior 2 or Sophomore 2.

Enrollment limited to students with department of Safety Management.

**SAFE 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 408 - Contemporary Safety Topics and Issues**

Examines emerging issues and topics in the field of safety. Must be taken the semester prior to internship.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 418 - Security in the Workplace**

Examines security in relation to protecting assets and resources within an enterprise.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SAFE 448 - Management and Integration of Safety**

Involves the development, integration, evaluation, management, and cost containment strategies of the safety function within an enterprise.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 450 - Internship**

Provides opportunity to apply theory and develop competencies through a work-related experience in an appropriate cooperating enterprise. Summers only.

Credits: 3-12

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2, Junior 1, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 478 - Environmental Permitting and Sustainability**

This course examines the role of Safety Management in assessment of environmental regulations and permitting and application of sustainability practices.

Prerequisites: SAFE 118<sup>D</sup> and SAFE 218<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Summer & Winter Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Safety Management.

**SAFE 488 - Safety Training and Development**

Examines workplace safety training and development as they relate to employer work task performance at all levels of an organization.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Safety Management.

**SAFE 490 - Independent Study**

Students study under the supervision of a professor on a specific and significant topic. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

**SAFE 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment is limited to students with a major in Safety Management.

## Science (SCI)

**SCI 101 - Science of Life**

A one semester foundational science course intended to provide students with: 1. An understanding of the scientific process; 2. Fundamental scientific literacy; 3. Background knowledge in biological and chemical concepts; 4. An understanding of how to collect, analyze, and interpret scientific data. This course is a combined lecture and lab course that will cover contemporary issues directly within the fields of biology and chemistry.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**SCI 102 - Understanding the Physical World**

A one semester foundational science course intended to provide students with: 1. An understanding of the scientific process; 2. Fundamental scientific literacy; 3. Foundational knowledge in geology, environmental science, space science, and physics concepts; 4. An understanding of how to collect, analyze, and interpret scientific data. A combined lecture and lab course that will explore contemporary issues directly related to geology, environmental science, space science, and physics.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

## Secondary Education/Foundations Education (SEFE)

**SEFE 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**SEFE 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed



**SEFE 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**SEFE 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SEFE 200 - Introduction to Education, Teaching Methods and Field**

This course is designed to introduce the student to the field of education. Topics covered include: the role of the teacher, structure and organization of schooling, and current issues and concerns relating to education.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Transfer Thread Completion Course

**SEFE 230 - Production and Utilization of Instructional Technology**

Selection, utilization and production of instructional materials. Equipment operation via self-instruction in the Media Lab.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**SEFE 245 - Middle Level Learning Theory**

This course provides pre-service teachers with a knowledge base of the learning theories, with a special focus on the application of the psychological learning theories to the teaching and learning of the adolescent learner.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 250 - Pre, Early, & Adolescent Development**

An analysis of the physical, social, emotional, cognitive, moral, and other developmental processes which occur during the pre-adolescent/adolescent years, and affect his/her learning.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 251 - Teaching Reading in the Content Areas Grades 4-8**

This course is designed to introduce the middle level teaching candidate to reading across the content areas.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Enrollment is limited to students with a program in Mid Level-Eng&Lang Arts (4-8), Mid Level-Mathematics (4-8), Mid Level-Social Studies (4-8) or Middle Level-Science (4-8).

**SEFE 280 - Cultural Minorities in Education**

A study of multi-cultural issues in American education with emphasis on the theory and practice relating to race, religion, ethnicity, social class, gender, age, and exceptionality.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**SEFE 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SEFE 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**SEFE 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SEFE 300 - Middle Level Cognitive Development**

This course provides pre-service teachers with a knowledge base of the various factors which affect the learning, cognition, and cognitive development of the pre-adolescent learner.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 311 - Teaching of Mathematics in the Middle School**

Students will explore curriculum models, teaching materials, technology and best teaching practices for enhancing middle school students' mathematical understanding.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 319 - Teaching of Social Studies in Secondary Schools**

The development and refinement of teaching competencies particularly related to the teaching of secondary school social studies: history, political science, economics, geography and sociology/anthropology. The course will emphasize the development of social studies in the school, teaching methodology (past and current), the unit approach to teaching social studies, media uses and preparation of media materials, teaching techniques, professional organizations, and teaching aids and materials such as computers, television and simulation programs.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 320 - Teaching of Language Arts in Secondary Schools**

The development and refinement of teaching competencies particularly related to instruction in secondary school language arts, including English. The course also emphasizes English curriculum, teaching strategies and methodologies and the use of media in content presentation.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 323 - Teaching World Languages**

Theory and methodology for teaching world languages throughout the K-12 curriculum.

Prerequisite: SEFE 200<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 324 - Methods for Teaching English as a Second Language and Bilingual Education**

A course designed to acquaint the prospective teacher at any level with the methodology used to teach English to native speakers of other languages. Also acquaints students with the specialized procedures used when teaching in bilingual classrooms (any two languages) on any level.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SEFE 325 - Teaching in the Middle Level Grades**

Focusing on middle school teaching in grades 4 through 8, this course examines the organization, curriculum, instructional strategies, classroom management techniques, and teaching methods for working with young adolescents. Also covered are middle level guidance, exploratories, scheduling, and parent-school relations.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 326 - ELL Strategies and Practice**

A course designed to acquaint the prospective teacher at any level with the methodology used to teach English Language Learners. Topics include linguistic and cultural diversity, standard-based instruction, assessment, and professionalism.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 329 - Methods of Instruction in Secondary Content Areas**

This course is designed to provide prospective secondary teachers with the opportunity to design and teach lessons using basic instructional models and teaching strategies. The role of reading, writing, and oral communication in the teaching/learning of secondary content is also addressed. Following microteaching episodes, students reflect upon and analyze the teaching processes to clarify instructional values and to encourage critical inquiry.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 335 - Teaching Middle Level Social Studies**

Designed for pre-service middle school teachers, focusing on grades 4 through 8, this multifaceted course compiles well-researched and essential information on social studies education. The course uses the standards recommended by the National Council for the Social Studies and the Pennsylvania Department of Education as a foundation, thoroughly discussing the core disciplines and thematic strands of social studies. The knowledge base is packed with useful information on an all-encompassing range of teaching methods and tools, including lesson planning, skills development, assessment, multiple intelligences, determining one's personal philosophy of education, and utilizing information technology.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 337 - Teaching Middle Level Language Arts**

This course provides pre-service upper elementary and/or middle-level teachers, focusing on grades 4 through 8, with the relevant teaching strategies and content for English pedagogy.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 338 - Standards-Based Instruction & Assessment in the Inclusionary Classroom**

Assessment skills, extensive practice, and the application of assessment results to design effective individualized interventions are essential middle level teaching skills. Successful demonstration of these abilities is an expected outcome through the PDE 430, Pennsylvania Statewide Evaluation Form for Student Professional Knowledge and Practice. Assessment knowledge has an important role in the standards and rubrics adopted by the National Middle School Association (NMSA). The "Assessment in a Standards Aligned System" section of this document has an overview of the types of assessments used in the Pre K-12 settings and competencies for all professional education candidates.

Credits: 3

Term(s) Typically Offered: Offered Spring & Winter Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 342 - Educational Psychology for Diverse Learners**

This course provides the knowledge-base of (behavior, social learning, cognitive, constructivist and humanistic) learning theories, as applied in the context of diverse teaching and learning environments. The content also includes the topics of assessment, evidence-based research methods, motivational theories, and classroom management skills to enable the pre-service teacher to create effective learning environments for diverse learning contexts.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SEFE 349 - Teaching of Science in the Middle School**

Students will explore curriculum models, teaching materials, technology and best teaching practices for enhancing middle school students' understanding in science.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 370 - Educational Measurements, Assessment and Evaluation**

Objectives for testing and evaluation; construction and analysis of classroom tests for evaluative and diagnostic purposes; construction and application of non-test tools for assessment, including portfolios; statistical analysis of testing and measurement data; use of standardized tests in the classroom; and the use of computers.

Prerequisite: SEFE 200<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SEFE 375 - Language Across the Secondary Curriculum**

An examination of the language processes and their connection to learning content in secondary school. Based on the understanding of language and learning processes, future secondary teachers learn to employ teaching strategies that both enhance learning and improve reading, writing, speaking, and listening skills. Required of all secondary majors.

Credits: 2

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 380 - History and Philosophy of Education**

Critical exploration of the philosophical issues and historical antecedents that form the bases for past and current American educational practice in a multicultural society.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SEFE 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SEFE 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SEFE 401 - Education and American Activism**

This course examines the connections between the American education system and social activism in the United States. This includes contrasting theories relating to the purpose of public education, historical analysis of cases in which the education system played an active role either in supporting social change or in reinforcing social order, and a critical reflection upon current education reforms in the United States.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Thematic Thread(s): Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

**SEFE 420 - American Education in the Twenty-First Century: A Comparative Perspective**

American educational policies and practices are viewed within a global context. Undergraduate students, who will become parents and taxpayers, are introduced to the core social and educational institution in developed or developing societies: the school.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SEFE 422 - Practicum in the Middle-Level Grades**

Designed to give middle-level majors a pre-student teaching field experience in the middle level grades under the supervision of a University faculty member.

Credits: 1

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 426 - Practicum in Middle-Level & Secondary Education**

Designed to give SEFE majors a pre-student teaching field experience in a middle-level or secondary classroom within the grade-level and content area of their degree program under the supervision of a university faculty member.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 439 - Issues in the Diverse Secondary Content Area Classroom**

This course is designed to help secondary teachers apply theoretical models to classroom management and to the teaching of reading and writing in content area classrooms. Additionally, the principles of school law as they apply to classroom teachers will be examined. Finally, the course will be taken concurrently with student teaching to facilitate the integration of theory with practice.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 455 - Student Teaching - Secondary Education**

Under the guidance of a cooperating teacher and university supervisor, students engage in two eight-week assignments on a full-time basis in specified school districts and attend scheduled seminars. Supervisors assign additional requirements.

Credits: 3-12

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 456 - Student Teaching - Middle Level Grades**

Under the guidance of a cooperating teacher and university supervisor, teacher candidates engage in two eight-week assignments on a full-time basis in specified school districts at the middle level and also attend scheduled seminars. University supervisors assign additional requirements.

Credits: 12

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SEFE 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SEFE 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SEFE 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Social Work (SOWK)

**SOWK 105 - Human Diversity**

An orientation to living and working with diverse populations within modern American society, including examination of the strengths and stresses associated with diversities.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**SOWK 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**SOWK 170 - Cultural Competence and Social Change**

This course is designed to provide an overview of social issues to increase student understanding of the problems faced by societies today. Students will enhance their skills in critical thinking to analyze and acknowledge complexities in social issues, assessing problems, advocating and facilitating change.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**SOWK 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SOWK 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**SOWK 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SOWK 200 - Introduction to Child Welfare**

Provides an overview of the child welfare system in the United States, including the history of the development of child welfare policies, programs, and services; exploring best practices in child welfare; and examining current and future issues and problems in this field.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Transfer Thread Completion Course

**SOWK 230 - Social Justice and Equality**

This course provides an overview of Frederick Douglass' perspectives on injustice and racial prejudice, which will be examined from his life experiences as a former slave who became the pre-eminent voice of the liberation struggle. The historical context of Douglass' life will be compared and contrasted to contemporary issues of race, ethnicity, freedom and diversity awareness.

Credits: 3

Term(s) Typically Offered: Offered Winter, Spring&Summer

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course

**SOWK 251 - Introduction to Social Work**

An orientation to the field of social work and social work activities in the community. Includes service learning.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**SOWK 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SOWK 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**SOWK 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed



**SOWK 300 - Crisis Intervention**

This course focuses on practice skills to effectively recognize and intervene in crises. This course examines factors influencing the development of crises, identification of potential crises and use of de-escalation skills. This course will focus on developing effective crisis intervention skills and techniques for a variety of crisis situations.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Citizenship & Social Problems, Transfer Thread Completion Course

Students with a semester level of Freshman 1 or Freshman 2 may **not** enroll.

**SOWK 310 - Animal Assisted Interventions**

This course is designed to provide students with an understanding of the human-animal bond and how this relationship can foster interventions in the human service and health care fields. Students will learn several animal-assisted interventions, beneficial effects and how they are implemented with diverse groups in various practice settings.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1 or Freshman 2 may **not** enroll.

**SOWK 311 - Clinical and Academic Documentation for Social Work**

This course will assist students in developing strong clinical documentation skills for social work practice. Students will be exposed and practice various types of clinical documentation. Additionally, students will enhance their clinical and academic writing by creating a portfolio of various documents.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SOWK 318 - Research Methods**

Major methods and procedures used in social work and sociological research.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Social Work.

**SOWK 319 - Statistical Methods**

Introduction to basic statistical concepts and research techniques used in social research. Also listed as PROF 317

Prerequisite: SOWK 318<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment is limited to students with a program in Social Work.

**SOWK 321 - Forensic Social Work**

This course applies social work principles to various aspects of the legal system. Students will address legal rights, policies and practice in various forensic settings and with clients involved with the law and legal system.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SOWK 328 - Human Behavior and the Social Environment**

Covers the biophysical, psychological, and social dimensions assessing social functioning during pregnancy, birth, newborn, infancy, and early childhood, middle childhood and adolescence, young and late adulthood.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Social Work or Social Work.

**SOWK 334 - Clinical Perspectives on DSM Diagnoses**

Course content related to taxonomy, etiology, and diagnostic impressions of psychiatric disorders will be presented. Social Work services will be analyzed in relation to the disorders.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Criminology & Criminal Justice or Social Work.

**SOWK 340 - Social Welfare Institutions**

An introductory analysis of social welfare policies, issues, and institutions.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Social Work.

**SOWK 355 - Social Work Practice with Individuals**

Principles and practice of interviewing processes as applied to casework methods. Grade of C or better is required in this course.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Social Work.

**SOWK 356 - Social work Practice with Groups & Families**

Expands knowledge and skills base to include social work practice with family and group systems. Grade of C or better is required in this course.

Prerequisite: SOWK 355<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Social Work.

**SOWK 357 - Social Work Practice with Organizations and Communities**

Expands knowledge and skills base to include social work practice in communities and larger social systems. Grade of C or better is required in this course.

Prerequisites: SOWK 340<sup>D</sup> and SOWK 356<sup>C</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Social Work.

**SOWK 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SOWK 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**SOWK 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SOWK 407 - Social Policy Issues**

Problems and issues associated with social policy including the politics of welfare policy.

Prerequisites: SOWK 251<sup>D</sup> and SOWK 340<sup>\*D</sup> (may be taken concurrently).

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a major in Social Work.

**SOWK 450 - SOWK Internship**

A Social Work Internship.

Corequisite(s): SOWK 460

Credits: 1-12

Term(s) Typically Offered: Offered Spring & Summer Terms

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a major in Social Work.

**SOWK 460 - Social Work Integrative Seminar**

This senior level course integrates a four year social work curriculum with emphasis on knowledge base and skill acquisition for working in micro, mezzo, macro and research practice. This course will be a corequisite with SOWK 450 (Internship)

Corequisite(s): SOWK 450

Credits: 3

Term(s) Typically Offered: Offered Spring & Summer Terms

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a major in Social Work.

**SOWK 490 - Independent Study**

Independent research under the guidance of a faculty member.

Prerequisite: Permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. (repeatable up to 6 credits) Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SOWK 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**SOWK 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Spanish (SPAN)

**SPAN 101 - Spanish Language & Culture I**

This course is the first in a three-course series that offers an introduction to the Spanish language and cultures of the Spanish-speaking World.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

**SPAN 102 - Spanish Language & Culture II**

This is the second in a three-course series that offers an introduction to the Spanish language and cultures of the Spanish-speaking World.

Prerequisites: minimum score of 15 in 'Placement in SPAN102' or SPAN 101<sup>D</sup> or SPAN 110<sup>D</sup> or SPAN 121<sup>D</sup> or SPAN 131<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

**SPAN 103 - Spanish Language & Culture III**

This course is the third in a three-course series that offers an introduction to the Spanish language and cultures of the Spanish-speaking World.

Prerequisites: minimum score of 25 in 'Placement in SPAN103' or SPAN 102<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

**SPAN 104 - Situational Spanish**

This course provides the opportunity to learn practical application Spanish phrases and cultural aspects relevant to future careers in fields that have direct contact with the public, depending on situations specific to the different professional fields.

Prerequisite: SPAN 102<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

**SPAN 110 - Spanish for Educators**

This course provides an introduction and essential tools for communicating with Spanish-speaking students, parents/guardians and school personnel to pre-service and in-service educators.

Credits: 3

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course

Enrollment is limited to students with a program in Early Childhood Ed (PK-4), Health and Physical Education, Early Child/Spec Ed(PK-4)PK-8), Sec Education-English(7-12), Sec Education-French (K-12), Mid Level-Engl&Lang Arts (4-8), Mid Level-Mathematics (4-8), Mid Level-Social Studies (4-8), Middle Level-Science (4-8), Sec Ed-Social Stud-Hist (7-12), Secondary Educ-Spanish (K-12), SPED Transition Programming, Music Education (K-12) or K-12 Art Teacher Preparation.

Enrollment limited to students in the College of Education or College of Liberal Arts colleges.

**SPAN 121 - Spanish for Health Professionals**

This course will explore occupational Spanish specializing in Health Care Professionals. This course provides an introduction and essential tools for communicating with Spanish-speaking patients. The course's context is health professions and communicative aspects within the field of Health. The topics presented are carefully selected/designed to help health care professionals manage various situations within the field while addressing Spanish-speaking patients. This course has no prerequisites. This course satisfies the prerequisite for Span 102.

Credits: 3

Term(s) Typically Offered: Offered Winter Terms

Thematic Thread(s): Citizenship & Social Problems, Human Diversity & Well-Being, Transfer Thread Completion Course, United States in Global Context

Enrollment limited to students in a Bachelor of Science degree.

**SPAN 131 - Spanish for the Business World**

This course is intended for students who wish to acquire knowledge of Spanish for use in a practical business context. This course provides an introduction and essential tools for communicating with Spanish-speaking clients and partners as well as culture background to succeed in a cross-cultural environment. The topics presented are carefully selected/designed to help business professionals manage various situations within the field while addressing Spanish-speaking clients and partners. This course has no prerequisites.

Credits: 3

Thematic Thread(s): Transfer Thread Completion Course

Enrollment limited to students in a Bachelor of Science degree.

**SPAN 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**SPAN 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SPAN 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**SPAN 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SPAN 200 - Writing in Spanish for the Professions I**

This course provides a review of basic Spanish grammar with an emphasis on developing writing skills for the professions.

Prerequisites: minimum score of 35 in 'Placement in SPAN200 level' or SPAN 103<sup>D</sup> or SPAN 104<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**SPAN 201 - Speaking in Spanish for the Professions I**

A functional course in speaking and writing Spanish, stressing everyday vocabulary and sentence structure. Some grammar review.

Prerequisites: SPAN 103<sup>D</sup> or SPAN 104<sup>D</sup> or minimum score of 35 in 'Placement in SPAN200 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**SPAN 215 - Topics in Hispanic Culture**

This course provides insight into Hispanic cultures by examining the practices and traditions of the different countries that comprise the Hispanic world. This course is taught in English.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

**SPAN 220 - Understanding Hispanic Cultures Through Reading**

In this course students develop a deeper understanding of the cultural diversity of the Hispanic World through a variety of texts and media related to different disciplines.

Prerequisites: SPAN 200<sup>D</sup> or minimum score of 35 in 'Placement in SPAN200 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**SPAN 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SPAN 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**SPAN 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SPAN 300 - Writing in Spanish for the Professions II**

This course reviews intermediate-level grammar concepts while at the same time focusing on writing skills with an emphasis on developing writing proficiency for the professions.

Prerequisites: minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in 'Placement in SPAN300 level' or SPAN 200<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPAN 301 - Speaking in Spanish for the Professions II**

This course is the second in a three-course sequence that focuses on developing students' oral proficiency, including fluency and functional competence.

Prerequisites: SPAN 201<sup>D</sup> and (SPAN 200<sup>D</sup> or SPAN 220<sup>D</sup>) or minimum score of 457 in 'Placement in SPAN300 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPAN 302 - Communication in Spanish for the Elementary Classroom**

This course is designed to offer the elementary education major specific language skills necessary for effective communication in the elementary education classroom. (open only to Ed majors).

Prerequisites: SPAN 201<sup>D</sup> or minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in 'Placement in SPAN300 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a minor in Spanish (Elem Ed).

Enrollment limited to students in the following programs:

- BSED11
- BSED1100
- BSED1189
- BSED1192
- BSED1231
- BSED1233
- BSED1234
- BSED1235
- BSED1284

**SPAN 303 - Developing Communicative and Cultural Competence for the Workplace**

This course is designed to teach students the necessary skills to interact effectively in Spanish in a professional setting.

Prerequisites: SPAN 200<sup>D</sup> and SPAN 201<sup>D</sup> and SPAN 220<sup>D</sup> or minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in 'Placement in SPAN300 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPAN 305 - Spain Today**

A study of the history of Spain and of important components of its culture, such as art, architecture, and daily life.

Prerequisites: (SPAN 200<sup>D</sup> or SPAN 201<sup>D</sup>) and SPAN 220<sup>D</sup> or minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in 'Placement in SPAN300 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPAN 307 - U.S. Latino Cultures**

A study of the cultural background of the members of the Spanish-speaking minorities in the United States, especially the Chicanos, Puerto Ricans and Cubans.

Prerequisites: SPAN 220<sup>D</sup> and (SPAN 200<sup>D</sup> or SPAN 201<sup>D</sup>) or minimum score of 457 in 'Placement in SPAN300 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPAN 309 - Hispanic Civilization for the K-12 Classroom**

This course, designed for the Elementary Education major, focuses on themes of Hispanic civilization and culture appropriate for inclusion in the K-12 classroom. Open to Spanish education majors only.

Prerequisites: (SPAN 200<sup>D</sup> or SPAN 201<sup>D</sup>) and SPAN 220<sup>D</sup> or minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in 'Placement in SPAN300 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Elementary Education (K-6), Early Childhood Ed (PK-4), Early Child/Spec Ed(PK-4)PK-8), Mid Level-Eng&Lang Arts (4-8), Mid Level-Mathematics (4-8), Mid Level-Social Studies (4-8), Middle Level-Science (4-8), Secondary Educ-Spanish (K-12) or Spanish (Elem Ed).

**SPAN 315 - Spanish Study Abroad**

This course is designed for students who wish to study the Hispanic society firsthand. Students will study the culture, literature, history, art, and other issues concerning the country where the program is offered.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPAN 318 - Hispanic Children's Literature for the K-12 Classroom**

Students will read legends, fables, poems which are part of the Hispanic tradition and which are told to or read by young children and younger adolescents.

Prerequisites: (SPAN 200<sup>D</sup> or SPAN 201<sup>D</sup>) and SPAN 220<sup>D</sup> or minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in 'Placement in SPAN300 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a minor in Spanish (Elem Ed).

Enrollment limited to students in the following programs:

- BSED11
- BSED1100
- BSED1189
- BSED1192
- BSED1231
- BSED1233
- BSED1234
- BSED1235
- BSED1284

**SPAN 326 - The Civilization of Spanish America: Precolumbian to 19th Century**

A study of the development of the civilization of Spanish America from Precolumbian times to the 19th century, including important aspects of their culture, such as art, architecture, and daily life.

Prerequisites: (SPAN 200<sup>D</sup> or SPAN 201<sup>D</sup>) and SPAN 220<sup>D</sup> or minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in 'Placement in SPAN300 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPAN 328 - Latin American Today**

A study of the development of the civilization of Spanish America from the 19th century to the present, including important aspects of their culture, such as art, architecture, and daily life.

Prerequisites: (SPAN 200<sup>D</sup> or SPAN 201<sup>D</sup>) and SPAN 220<sup>D</sup> or minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in 'Placement in SPAN300 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**SPAN 330 - Spanish Literature 1800 to Present**

A study of major writers genres and literary movements of Spain in this period.

Prerequisites: SPAN 220<sup>D</sup> and (SPAN 200<sup>D</sup> or SPAN 201<sup>D</sup>) or minimum score of 45 in 'Placement in SPAN300 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPAN 332 - Spanish American Literature - 19th Century to Present**

A study of major writers genres and literary movements of Latin American in this period.

Prerequisites: SPAN 220<sup>D</sup> and (SPAN 200<sup>D</sup> or SPAN 201<sup>D</sup>) or minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in 'Placement in SPAN300 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPAN 335 - Women in Hispanic Literature**

A study of Hispanic women authors and of Hispanic women as literary characters in Hispanic literature.

Prerequisites: SPAN 220<sup>D</sup> and (SPAN 200<sup>D</sup> or SPAN 201<sup>D</sup>) or minimum score of 457 in 'Placement in SPAN300 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPAN 340 - Introduction to Translation**

This course provides hands-on experience translating different types of texts to further develop Spanish language skills and intercultural competence.

Prerequisites: SPAN 300<sup>D</sup> or minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in 'Placement in SPAN300 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPAN 350 - The Sounds of Spanish**

In this course students will work on their Spanish pronunciation skills and will also learn about dialectal variations in the Spanish-speaking world.

Prerequisites: SPAN 200<sup>D</sup> and (SPAN 201<sup>D</sup> or SPAN 220<sup>D</sup>) or minimum score of 45 in 'Placement in SPAN300 level' or minimum score of 457 in 'Placement in SPAN300 level'

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPAN 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPAN 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPAN 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPAN 400 - Writing in Spanish for the Professions III**

This course provides an overview of intermediate- and advanced-level Spanish grammar with an emphasis on research and advanced writing skills.

Prerequisite: SPAN 300<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPAN 401 - Speaking in Spanish for the Professions III**

This course is the third in a three-course sequence that focuses on developing students' oral proficiency, including fluency and functional competence.

Prerequisite: SPAN 301<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPAN 431 - Exploring Spanish Culture through Media**

A study and analysis of the most important works of representative Spanish authors of this period.

Prerequisites: SPAN 300<sup>D</sup> and (SPAN 305<sup>D</sup> or SPAN 307<sup>D</sup> or SPAN 326<sup>D</sup> or SPAN 328<sup>D</sup>) and (SPAN 330<sup>D</sup> or SPAN 332<sup>D</sup> or SPAN 318<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPAN 432 - Exploring Latin American Cultures through Media**

A study and analysis of the most important works of representative Spanish-American authors of this period.

Prerequisites: SPAN 300<sup>D</sup> and (SPAN 305<sup>D</sup> or SPAN 307<sup>D</sup> or SPAN 326<sup>D</sup> or SPAN 328<sup>D</sup>) and (SPAN 330<sup>D</sup> or SPAN 332<sup>D</sup> or SPAN 318<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPAN 490 - Independent Study**

Students have an opportunity to study selected areas in greater concentration. The nature of the topic selected and its treatment are determined in consultation with the instructor. credits) Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPAN 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPAN 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Special Education (SPED)

**SPED 121 - Overview of Special Education**

The purpose of this course is to provide a broad overview of the terminology, strategies, and issues commonly encountered when addressing the needs of exceptional individuals. This course takes a multidisciplinary approach that begins with an introduction to the history of special education and important legislation, followed by discussion of individual areas of exceptionalities. Emphasis will be placed on etiology, identification, assessment treatment and social issues and concerns.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**SPED 122 - Low Incidence Disabilities**

This course will examine best practice and policies relating to the educational consequences of low-incidence disabilities. An emphasis on deafness, blindness, deaf-blindness, severe disability and multiple disability will occur. Placement and accommodation issues in integrated educational settings will also be a focus.

Prerequisite: SPED 121<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**SPED 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**SPED 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SPED 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**SPED 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SPED 220 - The Nature and Needs of Autism Spectrum Disorders**

This course will focus on an understanding of the characteristics of Autism Spectrum Disorders (ASD) and the implications for individual's lifespan. The course will explore the latest research on potential causes, best practices for assessment and intervention, as well as current legal and ethical issues related to autism services.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**SPED 222 - Introduction to Special Education Law**

In this course, students will discuss genesis of special education by way of litigation and resulting legislation as rooted in the Civil Rights Movement of the 1960's, PL 94-142, and the inception of IDEA Part A-D. An overview of PA Chapter 14 and its relation to IDEA, Chapter 15 and ADA, along with Chapter 16. Students will also explore LRE, compliance, and professional ethics and standards.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**SPED 230 - Early Intervention Practices for Students with Disabilities**

In this course, students will identify the critical components of an educational program for early learners with disabilities and medical diagnosis including: curricular areas, early interventions and effective teaching techniques, use of appropriated materials, transition to school age regarding Part C of IDEA, related services and personnel, parental involvement, assistive technology and inclusionary practices.

Prerequisite: SPED 121<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

**SPED 245 - Technology in Special Education**

Candidates will develop the use of technologies to assist in the teaching, remediation, assessment and enrichment of students with special needs in inclusive traditional and/or cyber classrooms. The goal is to help pre-service teachers implement instructional and assistive technology effectively. This course will also provide a framework for utilizing educational technology to meet the individualized needs of students.

Prerequisite: SPED 121<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1 or Freshman 2 may **not** enroll.

**SPED 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SPED 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**SPED 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SPED 302 - Developmental Disabilities**

The learner will identify the critical components of an educational program for persons who have mental retardation classified as moderate, severe, or profound including: curricular areas, effective teaching techniques, appropriate materials, team approaches, ancillary services, parental involvement and inclusionary practices. Includes a lab of three contact hours per week with students who have severe and/or multiple disabilities.

Prerequisites: (SPED 202<sup>D</sup> or SPED 122<sup>D</sup>) and (SPED 203<sup>D</sup> or SPED 121<sup>D</sup> or SPED 100<sup>D</sup>) and (SPED 204<sup>D</sup> or SPED 230<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPED 315 - Special Education Issues in Diverse Secondary Classrooms**

This course is designed to familiarize secondary education majors with the various behavioral problems they may encounter in the inclusive classroom. Suggestions are given for ameliorating these problems, as well as successfully organizing the classroom and classroom routine. Three units of study will be explored. The three units are: 1) Classroom management with a focus on dealing with students with special needs, 2) Legal issues for secondary teachers, 3) Impact of exceptionalities in inclusive settings.

Corequisite(s): SPED 455

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPED 341 - Transition Across the Lifespan**

This course is designed to provide students with a life management perspective for educating persons with disabilities in an inclusive setting. This course prepares students to apply the foundational principles of special education for meeting the major developmental needs of persons with disabilities from early infancy to adulthood. This course is designed to provide the undergraduate student with a foundation for the understanding of the major developmental needs and community requirements for individuals with disabilities.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPED 342 - Building Community Partnerships**

This course focuses on the multi-dimensional role of service provider to individuals with disabilities. In addition to hands-on experiences with service agencies, students enrolled in this course will interact with service providers, supervisors, related service personnel parents and caretakers. Students will learn how to take on all roles of a service provider and implement effective programming to address all the needs of a client(s). Students will become skilled in matching student needs with appropriate transition programming as well as identifying personnel key in providing necessary services.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Comm Prgms Amer with Disabil, Comm Prg Am Dis-Adap Phys Actv, Comm Prg Am Dis-Non-Prft Mgmt or SPED Transition Programming.

**SPED 343 - Americans with Disabilities**

This course will provide background for understanding how disabling conditions may handicap a person in terms of jobs, marriage, and family life, housing and transportation and citizenship. The course stresses how everyone is involved in determining the success or failure of the disabled in society. An historical overview of society's treatment of the disabled will be contrasted with recent legislation and the emerging roles of the disabled in American society. The impact of special education on the disabled person, the parents, siblings, employers, neighbors, and peers will be presented.

Credits: 3

Term(s) Typically Offered: Offered Fall, Winter, & Spring

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPED 346 - Assessment in Transition Planning**

This course introduces the student to the assessments utilized for evaluation of students at all levels of transition planning, spanning from school readiness assessments to transition planning for the secondary level. Students will learn to identify appropriate assessment based on student needs as well as how to administer and score evaluation data. In addition, the course will guide students in reviewing and interpreting assessment data to determine appropriate transition planning to address student needs. The course will also identify the major litigation and legislation that have significantly influenced the nature of service to exceptional populations in the area of transition planning and assessment of their needs.

Prerequisites: SPED 121<sup>C</sup> and SPED 122<sup>C</sup> and SPED 230<sup>C</sup> and SPED 341<sup>C</sup> and SPED 342<sup>C</sup> and SPED 343<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment is limited to students with a program in SPED Transition Programming.

**SPED 347 - Management & Leadership**

This is an advanced level course that expands students' knowledge in skills necessary to take on leadership and management roles in the secondary transition planning level. Students will be required to engage in professional organizations at the state and local level. Students will learn to identify how to develop an effective system for service delivery to clients. Additional, an emphasis will be placed on current funding sources in the nation and state as well as how to manage necessary paperwork for obtaining funding necessary to run appropriate transition programs for children and adults of transition age.

Prerequisites: SPED 121<sup>C</sup> and SPED 122<sup>C</sup> and SPED 230<sup>C</sup> and SPED 341<sup>C</sup> and SPED 342<sup>C</sup> and SPED 343<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment is limited to students with a program in SPED Transition Programming.

**SPED 350 - Universal Intervention**

In this course, student will identify the critical components of Tier 1 in the Multi-Tiered System of Support (MTSS) for learners with and without disabilities including: universal interventions, best practices, screening, progressing monitoring, classroom management, PBIS, collaboration, co-teaching, SDI and accommodations and inclusionary practices.

Prerequisite: SPED 121<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Corequisite(s): ELEC 311

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SPED 353 - Teaching in an Area of High Need**

In this course, we will discuss the problem of over representation of individuals from diverse backgrounds in special education and the racial, cultural, and economic concerns of school systems and communities (both domestically and abroad) trying to narrow the opportunity/achievement gap for students. During the semester, students will be analyzing some of the historical, socioeconomic, and political factors school systems in areas of high need confront. Specifically, students will investigate effective instructional and organizational practices, examine home-school connections, and identify possible disparities in available resources for urban and rural schools.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Post Baccalaureate, Sophomore 1 or Sophomore 2.

**SPED 360 - Targeted Instructional and Behavioral Interventions for Neuro-Diverse Learners**

In this course, students will identify the critical components of Tier II in the Multi-Tiered System of Support (MTSS) for learners with and without disabilities including: data-based decision making, evidenced based practices, supplemental and intensive programming, differentiated instruction and assessment. These concepts will be explored within the scopes of academic and behavioral supports for exceptional learners.

Corequisite(s): ELEC 420

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Early Childhood Ed (PK-4), Early Child/Spec Ed(PK-4)PK-8), Early Child/Spec Ed(PK-4)PK-12, Special Education (PK-12) or Exceptionalities.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SPED 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPED 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPED 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPED 410 - Transition Practicum**

The practicum course focuses on developing skills in collaboration, consultation and teaming to prepare pre-service Transition Specialist students for entry into a multi-disciplinary and multi-dimensional role of services provider to individuals with disabilities. In addition to hands-on experience with service agencies, Transition Specialist students enrolled in this course will interact with clients, service providers, agency supervisors, related service personnel and care takers.

Prerequisites: SPED 121<sup>D</sup> and SPED 122<sup>D</sup> and SPED 230<sup>D</sup> and SPED 341<sup>D</sup> and SPED 342<sup>D</sup> and SPED 343<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPED 431 - Intense Behavioral and Emotional Interventions for Neuro-Diverse Learners**

In this course, students will identify the critical components of Tier III Emotional and Behavioral Interventions within the Multi-Tiered System of Support (MTSS) for learners with and without disabilities including: overview of severe behavior. Functional Behavioral Assessment (FBA), use of evidenced based interventions to support challenging behavior, develop more age appropriate social and emotional skills, application of effective preventative and environmental planning to limit problem behaviors as well as understanding the acting out cycle, trauma informed care and legal implications surrounding challenging behaviors in today's schools.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SPED 432 - Intensive ELA Interventions for Neuro-Diverse Learners**

This course in Special Education is designed for the teacher candidate seeking certification in K-12 Special Education. This course will focus on reading and writing interventions. Students will gain experience with a variety of strategies and interventions to use with various levels of special education needs in the regular education classroom & in pull-out placements. This course will examine effective instructional practices and delivery methods for intensive levels of special education support (K-12) in both the inclusionary and resource settings.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SPED 433 - Assessment Strategies in Special Education**

This course is designed to provide undergraduate students with the skills and knowledge necessary to conduct educational assessment of diverse students and interpret assessment results in order to plan an educational program (i.e., determine eligibility and develop an individualized education program).

Prerequisites: SPED 121<sup>D</sup> and SPED 122<sup>D</sup> and SPED 230<sup>D</sup> and (SPED 325<sup>D</sup> or SPED 350<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.



**SPED 434 - Professional Collaboration and Ethical Practices**

This course focuses on skills in consultation, collaboration and learning to prepare the pre-service teacher for the multidimensional role of today's special educator. In addition to hands-on experience in classrooms, students enrolled in this course will interact with special educators, parents, general educators, and resource personnel among others. Application of teaching techniques with children with disabilities under faculty and host teacher supervision will provide the pre-service teacher with an opportunity for experience in the special education classroom as well as inclusive settings prior to the student teaching experience.

Prerequisites: SPED 121<sup>D</sup> and SPED 122<sup>D</sup> and SPED 230<sup>D</sup> and (SPED 325<sup>D</sup> or SPED 350<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SPED 435 - Processes and Procedures in Special Education**

In this course, we will discuss special education legal documentation, including referral forms relating to Tier 1-3 interventions, the evaluation process, ER, IEP, procedural safeguards, NOREPs, and Transition. Emphasis will be placed on legally defensible IEP writing, mediation, due process, objective tone, and data collection.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SPED 436 - Intensive Mathematics Interventions for Neuro-Diverse Learners**

In this course, we will discuss instructional interventions and strategies that can be utilized in an intensive, Tier 3 type, setting to assist neuro-diverse learners in understanding mathematics concepts/topics. Particular emphasis will be placed on topics and remediation strategies frequently encountered within the Grade 4 to Algebra/Grade 9 levels.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SPED 440 - Seminar in Special Education**

The purpose of this seminar is to help pre-service special education teachers understand some of the challenges encountered during the first year of teaching, and provide strategies to help prepare them to overcome these challenges as they begin their first year of teaching.

Corequisite(s): SPED 455

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPED 450 - Transition Internship**

This 12 credit internship course focuses on advancing skills in collaboration, consultation and teaming to prepare pre-service students for entry into a multi-disciplinary and multi-dimensional role of services provider to individuals with disabilities. Students set up their own internship sites with guidance and approval from their advisor. This hands-on experience with service agencies makes up 480 hours of time in the field. Transition Specialist students enrolled in this course will interact with clients, service providers, agency supervisors, related service personnel and care takers.

Prerequisites: SPED 121<sup>D</sup> and SPED 202<sup>D</sup> and SPED 203<sup>D</sup> and SPED 204<sup>D</sup> and SPED 212<sup>D</sup> and (SPED 311<sup>D</sup> or SPED 313<sup>D</sup>) and SPED 400<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPED 455 - Student Teaching - Special Education**

Under the guidance of a cooperating teacher and university supervisor, students engage in two eight-week assignments on a full-time basis in specified school districts and attend scheduled seminars. Supervisors assign additional requirements.

Prerequisites: SPED 202<sup>D</sup> and SPED 203<sup>D</sup> and SPED 204<sup>D</sup> and SPED 212<sup>D</sup> and SPED 314<sup>D</sup> and SPED 302<sup>D</sup> and SPED 306<sup>D</sup> and SPED 311<sup>D</sup> and SPED 312<sup>D</sup> and SPED 400<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3-12

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with the ACCEPTANCE - TEACHER CANDIDACY attribute.

**SPED 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPED 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPED 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Sport Management (SPMT)

**SPMT 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**SPMT 150 - Sport Management Practicum**

The SPMT practicum is designed to provide the student with a realistic experience at at level and in a setting similar to that in which he/she wishes to obtain employment. The practicum experience is a 50- hour learning opportunity in which the student assists in a particular aspect of an organization in the sport industry. SPMT 150 may be repeated to a maximum of 4 credits in 4 different experiences, and each should be with a different organization.

Prerequisite: SPMT 194<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Every Term

Enrollment limited to students with department of Sport Mgt, Hospitality & Tour.

**SPMT 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SPMT 194 - Introduction to Sport Management**

This course is an introduction to the field of sport management. Career options and managerial content will be reviewed. Foundation studies of sport, including history, philosophy, and professional skills, will be discussed. Must achieve at least a C grade before progressing to other SPMT courses.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment is limited to students with a program in Sport Management or Sport Management.

**SPMT 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**SPMT 196 - Global Sport Management**

As the economy has shifted from a domestic to a globally competitive marketplace, the demand has grown for sport managers who can function effectively in the international environment. This course develops a framework for understanding the international aspects of sport management. It provides future sport managers with a broad view of the factors underlying international sport competition, sport economics, sport marketing, sport management, and sport governance. Emphasis is on environmental dynamics, cultural and economic constraints, multinational sport business organizations, unique international sport events and international sport operations, strategy and policy.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**SPMT 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SPMT 269 - American Sport in the 21st Century**

This course is designed to give the students an understanding of the internal and external factors that shape sport in American culture. This course will analyze how sport mirrors societal changes and how sociological phenomena affect participation and behavior.

Credits: 3

Term(s) Typically Offered: Offered Fall & Summer Terms

Enrollment limited to students with department of Sport Mgt, Hospitality & Tour.

**SPMT 286 - Sport Communication and Technology**

This course is intended to provide students with a comprehensive understanding of communication and communication techniques that managers use to achieve excellence in sport organizations. Focus will be placed on public relations, as well as techniques for improving the communication skills of each student in an organized sport setting. Students will receive in-depth exposure to, (a) theories underlying the use of public relations in sport, (b) new technologies in sport communication, (c) desktop publishing in sport organizations, (d) sport organizational communication techniques, and (e) sport media relations.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Sport Mgt, Hospitality & Tour.

**SPMT 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SPMT 294 - Sport Management and Ethics**

This course is designed to integrate the concepts learned from the foundation courses in management as they apply to management areas of sport and sport agencies. The ethical strategies of sport management will be emphasized in all management decisions.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with department of Sport Mgt, Hospitality & Tour.

**SPMT 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**SPMT 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**SPMT 301 - The Fan Experience**

This course will demonstrate how the fan experience in a sport venue is impacted by marketing, promotions, the venue staff, venue design, technology, and other factors. Students will understand the customer journey and be able to identify and eliminate friction points in the fan experience.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPMT 315 - Diversity Issues in Sport Management**

This course is designed to explore the persistent causes of pervasive racism and sexism in sport as it relates to the sport management field.

Prerequisites: SPMT 194<sup>C</sup> and SPMT 196<sup>D</sup> and SPMT 269<sup>D</sup>

<sup>C</sup> Requires minimum grade of C.

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1 or Freshman 2 may **not** enroll.

Enrollment limited to students with department of Sport Mgt, Hospitality & Tour.

**SPMT 369 - Sport Budgeting and Finance**

The focus of this course is on budgeting and financial principles in the sport industry. Major components of the course include analyzing budgets from youth, community, recreational, interscholastic, intercollegiate, professional, and international sport organizations, as well as studying the financial composition and impact of the sport industry. Students will also learn to construct various types of budgets used by sport organizations.

Prerequisites: SPMT 194<sup>D</sup> and SPMT 196<sup>D</sup> and SPMT 269<sup>D</sup> and SPMT 286<sup>D</sup> and SPMT 294<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPMT 386 - Leadership in Athletic Administration and Sport Management**

The major emphasis is on the preparation of athletic administrators and sport managers within collegiate university, high school, community and youth sport organizations. Information presented in this course will examine leadership theoretical concepts to help prepare students pursuing a career in athletics management/administration. Through critical thinking component and practical application exercises, the student will apply leadership theories, principles and concepts. Ultimately, the student will develop essential leadership competencies and skills for today's athletic administrators.

Prerequisites: SPMT 150<sup>D</sup> and SPMT 194<sup>C</sup> and SPMT 294<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with department of Sport Mgt, Hospitality & Tour.

**SPMT 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPMT 394 - Sport Marketing**

Sport Marketing is designed to apply marketing principles to the area of sport, sport events and sport products. Marketing strategies including sales, promotions and advertising of sport will be emphasized.

Prerequisites: SPMT 150<sup>D</sup> and SPMT 194<sup>C</sup> and SPMT 196<sup>D</sup> and SPMT 286<sup>D</sup> and SPMT 294<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Winter Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Sport Mgt, Hospitality & Tour.

**SPMT 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPMT 396 - Selling in the Sport Industry**

This course examines the skills required for a successful career in sport sales, including personal selling, social media, and electronic sales. Students will learn sales strategies for single game tickets, season tickets, group tickets, and premium tickets and will be involved in selling tickets for a sport organization.

Prerequisites: SPMT 150<sup>D</sup> and SPMT 194<sup>C</sup> and SPMT 196<sup>D</sup> and SPMT 286<sup>D</sup> and SPMT 294<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring & Winter Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students in the BS 2150 program.

Enrollment limited to students with department of Sport Mgt, Hospitality & Tour.

**SPMT 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPMT 406 - Sport Fundraising and Event Management**

The course content will include multiple aspects of creating, funding, and executing a variety of sports events. Topics include event planning, staffing, managing, and evaluating. Students will plan, develop, and execute their own event. In addition, the various aspects of athletic development and fundraising, particularly at the intercollegiate level, will be explored.

Prerequisites: SPMT 150<sup>D</sup> and SPMT 194<sup>C</sup> and SPMT 196<sup>D</sup> and SPMT 286<sup>D</sup> and SPMT 294<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Sport Mgt, Hospitality & Tour.

**SPMT 450 - Sport Management Internship**

This course provides students with the opportunity to apply sport and fitness career-oriented skills in public, commercial, and private agencies. The internship is designed to be an in-depth experience. This is a Theory and Technique Course. All Sport Management coursework must be completed before enrolling in SPMT 450.

Prerequisites: SPMT 150<sup>D</sup> and SPMT 194<sup>C</sup> and SPMT 196<sup>D</sup> and SPMT 269<sup>D</sup> and SPMT 286<sup>D</sup> and SPMT 294<sup>D</sup> and SPMT 315<sup>D</sup> and SPMT 394<sup>D</sup> and SPMT 396<sup>D</sup> and SPMT 406<sup>D</sup> and SPMT 486<sup>D</sup> and SPMT 494<sup>C</sup> and SPMT 499<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 1-12

Term(s) Typically Offered: Offered Summer Terms

Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with department of Sport Mgt, Hospitality & Tour.

**SPMT 486 - Sport Law and Facilities**

The course will demonstrate how various aspects of law and the legal system apply to the sport industry, with a particular emphasis on risk management, and sport facility operations. In addition, the course will provide a fundamental overview of the US court system.

Prerequisites: SPMT 150<sup>D</sup> and SPMT 194<sup>C</sup> and SPMT 196<sup>D</sup> and SPMT 286<sup>D</sup> and SPMT 294<sup>D</sup> and SPMT 269<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring & Summer Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Sport Mgt, Hospitality & Tour.

**SPMT 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPMT 494 - Sport Management Senior Seminar**

This course is designed for the senior Sport Management student, this course will examine topics dealing with sport finance management, sport law, sport facility management, and time and stress management. Field trips to sport agencies will be required. This course must be taken in the academic semester prior to SPMT 450 (Internship).

Prerequisites: SPMT 150<sup>D</sup> and SPMT 194<sup>C</sup> and SPMT 196<sup>D</sup> and SPMT 269<sup>D</sup> and SPMT 286<sup>D</sup> and SPMT 294<sup>D</sup> and SPMT 315<sup>D</sup> and SPMT 394<sup>D</sup> and SPMT 396<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with department of Sport Mgt, Hospitality & Tour.

**SPMT 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPMT 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**SPMT 499 - Sport Management Research Methods**

A study of research methodology and terminology in Sport Management entailing a critical analysis of available research. Specific attention is directed to formal written communication and oral presentation skills.

Prerequisites: SPMT 150<sup>D</sup> and SPMT 194<sup>C</sup> and SPMT 196<sup>D</sup> and SPMT 269<sup>D</sup> and SPMT 286<sup>D</sup> and SPMT 294<sup>D</sup> and SPMT 394<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Sport Mgt, Hospitality & Tour.

## Statistics (STAT)

**STAT 124 - Introduction to Survey Methods**

Introduction to Survey Methods: A 100 level course that introduces students to aspects of how surveys work. Students learn about the design, and interpretation of survey data. A range of survey strategies (e.g., telephone, face-to-face, mail and internet surveys) within the broader context of a research or evaluation project are introduced. Topics include formulation of research goals, developing an appropriate questionnaire design, protection of human subjects and proper conduct of research, sample size calculation and sample design, survey administration, construction of a survey report including basic data analysis techniques, and presentation of the results of a survey. Class topics are designed to convey practical knowledge of survey design.

Prerequisite: ACSD 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**STAT 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**STAT 152 - Elementary Statistics I**

This is a course about how data inform every aspect of our lives. This course focuses on what data are collected, how they are collected, how they are summarized and interpreted, and how possible error in those data is quantified and understood. In this class, we will learn about ways in which statistics are used by businesses, governmental agencies, researchers, and practitioners to understand our world. Topics covered include descriptive statistics, bivariate and multivariate data, elementary probability, random variables, normal and binomial probability distributions, Central Limit Theorem, confidence intervals, hypothesis testing, and simple linear regression.

Prerequisites: (ACSD 110<sup>C</sup> or ESAP 110<sup>C</sup>) or minimum score of Y in 'WAIVE ACSD110 W HIGHER MATH'

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course



**STAT 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**STAT 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**STAT 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**STAT 252 - Introduction to Statistical Modeling**

What do we mean when we talk about "statistical modeling"? How can statistical models be used to provide evidence for scientific or social theories? In this course, we begin by reviewing hypothesis testing and learn how hypothesis testing is applied in a wide variety of statistical contexts. We then move on to the workhouse of statistical modeling, linear regression, and learn the complex methods used to determine the validity of regression models. We then touch on analysis of variance models, polynomial regression, and time series. R will be used for data analysis, but no prior knowledge of R is assumed.

Prerequisites: STAT 152<sup>D</sup> and ENGL 102<sup>D</sup> and (MATH 123<sup>D</sup> or MATH 125<sup>D</sup> or MATH 225<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**STAT 254 - Nonparametric Statistics**

Statistical models in nonparametric settings. Theory and practice using techniques requiring less restrictive assumptions about the distribution of the data. Nonparametric analogues of t- and F-tests in one and two sample settings, ANOVA, regression and correlation will be discussed.

Prerequisites: MATH 125<sup>D</sup> and (MATH 153<sup>D</sup> or STAT 153<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**STAT 256 - Statistical Computing**

Statistical computing considers how data are processed and analyzed, and how statistical models are simulated, in a computational setting. The current landscape of the statistical computing community will be explored, including common statistical software, proprietary versus open-source statistical languages, and how statistical software packages are tailored for specific uses. Computationally intense statistical techniques will be discussed and programmed. At least one proprietary and one open-source statistical computing environment will be learned. Students will learn how to combine the functionality of different statistical packages to create and present a data analysis optimally. Prior experience with computer programming highly recommended.

Prerequisite: STAT 252<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**STAT 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**STAT 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**STAT 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**STAT 318 - Statistical Study Design**

There are five basic sources of data that can be used for a statistical study: observational data, experimental data, data from a survey or census, simulation data, and found data. In this course, we learn the strengths and weaknesses associated with each study type, exploring the concepts of randomization, representation, causality, weighting, estimation, and variance. Ethical issues associated with statistical studies will also be discussed. A working knowledge of spreadsheet software such as Microsoft Excel is assumed.

Prerequisite: STAT 152<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**STAT 325 - Advanced Statistical Methods**

Statistics is used in computer algorithms (machine learning) to enhance computer decision-making and prediction capabilities. This course will cover a wide variety of topics in statistical learning methods. Major statistical methods used in machine learning such as linear regression, survival analysis and others will be discussed. Additional topics include unsupervised learning and supervised techniques such as principal component analysis, nearest neighbor, random forest, support vector machines and neural networks. Simulation methods, such as the EM algorithm, Metropolis-Hastings algorithm and the Markov Chain Monte Carlo method will also be discussed.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment is limited to Graduate level students.

**STAT 350 - Applied Statistics**

A calculus-based introduction to probability and statistical applications. Discrete and continuous probability and expected value. Confidence intervals and hypothesis testing for single populations. This course is not open to students who have credit for MATH 352. This course does not count as an upper division elective mathematics course for mathematics majors.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**STAT 352 - Mathematical Statistics I**

An introduction to the mathematical foundations of probability theory including discrete and continuous probability distributions, random variables, mathematical expectation, moment, and moment generating functions.

Prerequisite: MATH 230<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**STAT 353 - Mathematical Statistics II**

Functions of random variables, sampling distributions, introduction to mathematical theory of statistical inference, including methods of moments, estimators, maximum likelihood estimators, sufficient statistics, interval estimates, and hypothesis testing.

Prerequisites: MATH 352<sup>D</sup> or STAT 352<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**STAT 354 - Mathematical Statistics III**

Stochastic processes and statistical inference including: Type I and Type II errors, MLE, Neyman-Pearson lemma, order statistics, Poisson processes, ANOVA, nonparametric tests, comparing models and Bayesian parameter estimation.

Prerequisites: MATH 231<sup>D</sup> and (MATH 353<sup>D</sup> or STAT 353<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**STAT 363 - Statistical Learning**

The field of statistical learning encompasses the theory and data analytic techniques developed to process and make sense of evolving data challenges arising in the fields of data science and machine learning. This course will cover the theoretical underpinnings of supervised and unsupervised learning techniques, including generalized linear models, classification, dimension reduction, and cluster analysis. R and R-studio will be used for illustrative purposes. A working knowledge of linear algebra and multivariate calculus is assumed. Previous experience using R software package is also assumed.

Prerequisites: (MATH 309<sup>D</sup> or MATH 232<sup>D</sup>) and MATH 231<sup>D</sup> and STAT 252<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**STAT 372 - Forecasting & Time Series**

An introduction to creating, solving, analyzing and interpreting real-world time-series and forecasting models. Topics include linear, autoregressive, moving average and other forecasting and time-series techniques, transfer functions, multivariate model building, stationary and nonstationary techniques. Applications may include all areas where forecasting is required including transportation, finance, scheduling, networks, and supply chains. Appropriate software tools for analyzing forecasting models including software such as SAS and spreadsheet software will be taught.

Prerequisites: MATH 252<sup>C</sup> or STAT 252<sup>C</sup> or MATH 350<sup>C</sup> or STAT 350<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**STAT 373 - Statistical Quality Control**

A comprehensive coverage of modern quality control techniques including the design of statistical process control systems, acceptance sampling and process improvement.

Prerequisites: MATH 230<sup>C</sup> and (STAT 252<sup>C</sup> or STAT 311<sup>C</sup>)

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**STAT 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**STAT 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**STAT 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**STAT 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**STAT 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**STAT 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Strategic Communication and Media (COMM)

**COMM 110 - Communication Concepts**

An overview of basic theories concerning the communication process. Recommended as a basis for major study in the area.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Human Diversity & Well-Being, Transfer Thread Completion Course

**COMM 115 - Visual Literacy**

A cornerstone course that involves the study of visual forms of communication with an emphasis on image-based media (newspaper, magazine, film, television, photography, informational graphics, interactive multimedia, digital games and web-based technologies). Topics include visual interpretation, visual manipulation, visual conventions, the role of visual media in cultural processes, and aesthetic appreciation.

Credits: 3

Term(s) Typically Offered: Offered Fall, Winter, & Spring

Thematic Thread(s): Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

**COMM 120 - Introduction to Digital Photography**

This course provides an introduction to the basic concepts of digital photography. Technical and compositional elements for the creation of quality digital photography are covered. Focus on this course is on the commercial application of photography for media production.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**COMM 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**COMM 170 - Communicology**

This course will introduce students to the methods of social science inquiry with an emphasis on how to analyze social trends and propose solutions to social problems facing our world within local, national, and/or global communities. Students will learn about social scientific concepts, theories, and research as they investigate the dynamic processes of understanding and sharing meaning in diverse contexts. (3 credits). No prerequisites.

Credits: 3

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**COMM 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**COMM 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**COMM 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**COMM 200 - Civil Discourse: Theory & Practice**

Theory and practice of promoting shared understanding and the common good through civil discourse as related to the development and presentation of oral messages. Students will be expected to develop an understanding of the principles and practices of public speechmaking that constitute civil discourse, how the First Amendment enables it, its history and role in problem-solving, and the influence of mediated discourse on democracy.

Credits: 3

Term(s) Typically Offered: Offered Every Term

**COMM 201 - Digital Imaging**

This course exposes students to the use and manipulation of electronically generated images through hands-on experience with digital cameras and scanners. Market specific imaging software is used to further enhance and manipulate imagery. Course topics include visual aesthetics, composition, image layering, photo-retouching, spatial relationships, compression techniques, digital painting, editing, color adjustment, filtering, image capture and file formatting.

Credits: 3

Enrollment limited to students with department of Strategic Comm and Media.

**COMM 204 - Environmental Communication**

In this course, students will learn about the theoretical and applied concepts that guide the discipline of environmental communication including rhetoric & discourse, media, public participation, social marketing, collaboration & conflict resolution, risk communication, and pop culture. Students will demonstrate understanding and show application of materials for successful environmental communication in a variety of protected areas and conservation settings.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

**COMM 205 - Audio Production**

An introduction to the aesthetic and technical production of audio for a variety of media and disciplines. Course topics include principles of hearing, sound, acoustics, and psychoacoustics, field and studio recording techniques, tools and applications for single and multi-track production and editing; and the development of vocal techniques associated with on-air announcing for radio, television and online productions.

Prerequisite: COMM 110<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1 may **not** enroll.

**COMM 215 - Small Group Communication**

Communication problems and processes in small groups. Topics include role and nature of the small group, communication structure, problem-solving techniques, and leadership.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Citizenship & Social Problems, Cultural Literacy & Community Building, Transfer Thread Completion Course

**COMM 217 - Intercultural Communication**

This course is designed to create a greater understanding of communication patterns and breakdowns which occur as members of one culture group interact with those of another culture group. This course will also develop an increased awareness of particular skills and knowledge that can foster more effective intercultural communication.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Human Diversity & Well-Being, Institutions & Human Innovations, Transfer Thread Completion Course

**COMM 228 - Principles of Creative Advertising**

This course introduces students to the history, role and context of advertising and how advertising messages solve communication problems by informing, changing attitudes and motivating behavioral changes among an organization's target audiences. Students will learn fundamentals about the advertising development and execution process, including theory and strategy, copy writing, design and selection of media.

Credits: 3

Term(s) Typically Offered: Offered as Needed, Offered Spring Terms Even

**COMM 231 - Principles of Integrated Marketing Communication & Public Relations**

This course seeks to introduce students to the principles of integrated marketing communication and public relations. Students will examine the strategy and tactics through which professional communicators seek to engage audiences to establish and maintain relationships between a brand/organization and its publics. In doing so, the course addresses audience analysis, audience behavior, brand messaging, strategic planning, data analysis & metrics, message strategies & tactics, digital and social media, ethics and regulation. Assignments engage students in analysis relevant to professional practice.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**COMM 232 - Publication Production**

This course will be concerned with the nonverbal aspects of print communication, i.e., areas by which the communication process can be enhanced by the use of pictures, charts, graphs, white space, type faces and sizes, etc. It seeks to make students aware of the fact that print communication does not involve only words.

Credits: 3

**COMM 235 - Introduction to Digital Design**

Exposes students to the manipulation of digital images and their use in digital publication through hands-on experience with market-specific software. Course topics include visual aesthetics, composition, spatial relationships, type-faces, and file formatting.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**COMM 242 - Media Writing**

Basic course in media writing techniques and news writing for print, broadcast, and online media platforms. Students practice and write news stories utilizing standard media editing, organization, style, sourcing, and quotation modes.

Prerequisite: ENGL 102<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**COMM 247 - Photojournalism**

Photojournalism upholds the professional standards specific to newspaper photography and the recording of news events visually. Students will be introduced to basic photography skills and required to shoot assignments according to print standards on deadline. The course includes issues related to the specialization of shooting sports, spot news, features and special essays. Technical aspects of digital photography and printing for publication are also reviewed.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

**COMM 248 - Interactive Multimedia 1**

An introduction to the production of written and media-based content for a variety of web-based applications. Course topics include the use of content management systems, the basics of web design and blog creation, writing for the web, making media for the web, connecting to social media and web analytics.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**COMM 254 - Video Production**

An introduction to video production as communication media. Emphasis on the processes and technologies of single-camera production, including: (1) operation of audio and video recording equipment, and (2) development of techniques for composition, lighting, scriptwriting, storyboarding, directing, and editing.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**COMM 256 - Message Preparation**

An introduction to message preparation for a variety of media and communication functions, including radio, television, video, podcasts, instructional media, social media, websites, and advertising.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students with department of Strategic Comm and Media.

**COMM 257 - Recording and Producing in the Audio Industry**

To better comprehend and appreciate the industry, this course will introduce students to the business of audio production and publishing. The course will address the elements of recording contracts, production and recording royalties, producing rights, and copyright laws within the audio industry. Students gain valuable knowledge in the legal and business areas within the recording industry.

Credits: 3

**COMM 258 - Interactive Multimedia 2**

An introduction to the aesthetic and technical production of basic multimedia content for a variety of applications and disciplines. Course topics include basic aesthetics of multimedia, and introduction to media coding and industry specific applications, and development of graphic, animated, and interactive media assets.

Prerequisites: COMM 235<sup>D</sup> or COMM 201<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

**COMM 263 - Mass Media and Society**

An introduction to the mass media that includes an examination of the historical development, current structure, and functions of the traditional and emerging media. The course will also explore the economic, legal, and ethical issues facing the media and introduce the interaction of the media and society, culture, and the individual.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

**COMM 270 - Strategic Health Communication**

This course examines strategic communication in the areas of health and the healthcare system, current events and issues in health communication, and the role of media and communication technologies in reaching individuals, communities, and specialized target audiences. Topics such as diversity, crisis communication, and ethics in the context of health communication will be addressed. Students will learn how to apply persuasive strategies and health communication tactics in the development of health communication campaigns.

Credits: 3



**COMM 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**COMM 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**COMM 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**COMM 303 - Communication and Media Ethics**

This course will address the application of ethical standards, guidelines, and policies to situations related to media and to communication. This course is based on two fundamental premises: (1) we create the sort of person that we are through our actions and inactions, and (2) an ethical communicator is one who acts with integrity. This course will cover what constitutes communication ethics from various historical points of view, how recent ethical conflicts have arisen in media production and communication, and how to apply ethical judgments to issues and controversies.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 305 - Broadcast Journalism**

An examination of topics critical to practice of broadcast journalism, including researching, news-gathering techniques, writing, and production skills. The course will also introduce the components of the broadcasting system in America including economics, programming, regulations, and broadcast technologies.

Prerequisites: (COMM 242<sup>D</sup> or COMM 256<sup>D</sup>) and COMM 110<sup>C</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 307 - Social Media**

This course will provide students with a professional approach to using social media tools in their field, examining both the technological and theoretical perspectives of social media through the hands-on application of the technologies.

Prerequisite: COMM 110<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment is limited to students with a program in Communication, Comm-Graphic Design(Art Major), Communication Studies, Strategic Communication&Media, Communication, Strategic Communication&Media, Environ Comm & Heritage Interp, Advertising, Converged Journalism, Digital Media, Integrated Marketing or Public Relations.

**COMM 310 - Communication Research Methods**

An introduction to the principles, procedures, and tools of research used in the analysis of the communication situation, including consideration of research design and statistical analysis and the identification, control, and measurement of communication variables.

Prerequisite: COMM 110<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Every Term

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 312 - Argumentation**

A study of argumentation as a decision-making process. Course focuses on theories of argument, the roles of advocates and opponents, the nature of argument building, evidence, and reasoning and argument in various contexts.

Prerequisites: COMM 200<sup>C</sup> and COMM 110<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 314 - Interpersonal Communication**

This is a theory-based course examining the process of communication in dyadic and group settings. Emphasis is placed upon (1) influences upon communication processes and resulting behavior and content and (2) the development of skills and skill assessment in both settings.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 315 - Organizational Communication**

A study of the communication behavior of persons in organizations. Considers the nature of organizations, communication structures in organizations, and the development of communication training in organizations.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 317 - Topics in Global and Intercultural Communication**

To promote effective communication with diverse audiences in an increasingly globalized world, this course develops theoretical and applied approaches to global and intercultural communication. Through readings, resources, and case studies, students will explore intercultural communication in a variety of global contexts, analyze current global communication issues, and develop the ability to design communication strategies that are specific and adapted to an audience's historical and cultural milieu.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 318 - Professional Presentation**

Principles and applications of communication techniques and media for presentations and processes common to professional settings.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 332 - Case Studies in Public Relations and Integrated Communication**

This advanced course seeks to develop critical thinking skills through the examination of audience-centered case studies. Students examine how professionals in public relations and integrated communication develop objectives that translate into communication campaigns, illustrating theoretical applications in real-life situations. The development of analytical skills, ethical guidelines, and issues of diversity in communication practice are emphasized.

Prerequisites: COMM 231<sup>D</sup> and COMM 110<sup>C</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 333 - Writing for Public Relations and Integrated Marketing Communication**

Course seeks to further develop the writing skills of public relations and integrated marketing communication majors. Course assignments focus on expanding students' ability to make critical decisions regarding the process of gathering necessary information, identifying objectives, and creating appropriate messages for specific target audiences.

Prerequisites: (COMM 242<sup>D</sup> or COMM 256<sup>D</sup>) and COMM 231<sup>D</sup> and COMM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 334 - Publication Production**

The course continues to expose students to the in-depth study of electronic publication issues, specifically with design and layout for newspapers, annual reports and other multiple-page publications. The course covers issues related to prepares, separations, advanced topography and paper selection.

Prerequisites: (COMM 235<sup>D</sup> or COMM 232<sup>D</sup>) and COMM 110<sup>C</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 335 - Digital Animation**

An exploration of the aesthetic and technical production of animated and interactive assets for a variety of media applications. Course topics include development of raster and vector graphic elements and design and production of both simple and interactive animation for a variety of applications and disciplines.

Prerequisites: (COMM 235<sup>D</sup> or COMM 201<sup>D</sup>) and COMM 110<sup>C</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 336 - Media Relations and Crisis Communication**

This course focuses on two key areas of public relations and crisis communication. During the first half of the semester, this course will explore how the news media works and how PR practitioners establish and maintain positive relationships with the news media. This course will explain the role of the news media in message dissemination and how to effectively work with reporters. During the second half of the semester, students will build on their media relations knowledge and explore issues and crisis management - before, during and after a crisis. Students will learn common crisis response strategies to address many organizational audiences through well-known case studies. Emphasis will be placed on practical application of crisis communication theory.

Prerequisites: COMM 110<sup>C</sup> and COMM 231<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

Enrollment limited to students in the College of Business college.

**COMM 342 - Sports Journalism**

Discussion of ethics and responsible sports journalism, sports information and public relations interview techniques, broadcast sports journalism. Guest lecturers in sports information, public relations, and broadcast journalism may speak on relevant topics.

Prerequisites: COMM 242<sup>D</sup> and COMM 110<sup>C</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 343 - Feature Journalism**

Course will focus on writing feature articles for newspapers and magazines.

Prerequisites: COMM 242<sup>D</sup> and COMM 110<sup>C</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 347 - New-Media Journalism**

An examination of new-media forms and the effects of new digital media on media industries and the practice of journalism. The course will examine the differences between traditional and new media journalism in theory and in practice and explore online writing techniques and the impact of social networking sites on the practice of journalism.

Prerequisites: (COMM 242<sup>D</sup> or COMM 248<sup>D</sup> or COMM 256<sup>D</sup>) and COMM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 348 - Advanced Journalistic Writing and Reporting**

Instruction in writing and reporting techniques beyond the basic news story, focused on detailed, in-depth news-writing and news-gathering practices, including use of human and documentary sources, toward production of public affairs stories; discussions of contemporary journalistic ethics and values.

Prerequisites: COMM 242<sup>D</sup> and COMM 110<sup>C</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 350 - Editing for Video**

This course provides students with the opportunity to expand their knowledge of video editing. Special attention is given to expanding skill sets associated with digital non-linear editing.

Prerequisites: COMM 254<sup>D</sup> and COMM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 352 - Digital Radio Production**

This course introduces students to the business and production of digital radio broadcasting, including broadcast technology, producing, directing, writing, and performance for radio. Students gain experience in studio and control room operation and production roles.

Prerequisite: COMM 110<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Strategic Comm and Media.

**COMM 354 - TV Studio Production**

The course covers the process and technique of multi-camera video production. Students gain experience in studio and control room operation and production roles. The course trains students to integrate video packages produced in the field for presentation in a multi-camera studio broadcast.

Prerequisite: COMM 110<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 355 - TV Field Production**

An advanced course in the processes and techniques of single-camera field production and editing. Students will report, film, write, and edit packages for television news.

Prerequisite: COMM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 359 - Interactive Multimedia 3**

This course provides students the ability to move beyond the traditional models of information distribution using image, sound, motion and text. The course introduces the fundamentals of communicating through digital interfaces with an audience. Topics include digital imaging, creating effective interactive projects, models of information structure, analysis of design problems and distribution models. Theories of communication, learning, human-centered design and project evaluation are discussed.

Prerequisites: COMM 258<sup>D</sup> and COMM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 360 - Corporate Media**

The application of adult training theories, communication theories, and production skills in the planning, design, and implementation of media in the corporate and institutional setting, with emphasis on media management and the use of media in training and development.

Prerequisites: (COMM 235<sup>D</sup> or COMM 232<sup>D</sup>) and COMM 110<sup>C</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 364 - Strategic Brand Communication**

This course provides insights on developing strategic brand communication strategies. This course offers essential concepts, frameworks, theories, practices, and skills required to create and manage strategic brand communications.

Prerequisites: COMM 231<sup>D</sup> or MRKT 330<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

Enrollment limited to students in the College of Business college.

**COMM 365 - Sports and Esports Production**

The course prepares students to broadcast sports and esports events and news. Topics covered include media production, play-by-play announcing, studio sportscasts, field reporting, pre-game and post-game analysis, social media integration, streaming, and content creation for live sports broadcasts.

Credits: 3

**COMM 370 - Health Communication Cases and Strategies**

This course further develops students' strategic competencies in the area of health communication through the investigation of case studies and campaign design. Students will analyze proactive and responsive communication strategies; messaging techniques and audience segmentation; multimedia and multiplatform tactics; and media relations and crisis response. Students will utilize qualitative and quantitative research techniques to drive messaging and strategy in the creation of integrated health communication campaigns.

Prerequisite: COMM 270<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2 or Sophomore 2.

Enrollment limited to students in the College of Business college.

**COMM 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Prerequisite: COMM 110<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisite: COMM 110<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 401 - Digital Imaging**

This course continues to expose students in the use, manipulation and creation of digital images through hands-on experience with market specific imaging software. Course topics include visual aesthetics, image composition, vector graphics, typography, image scalability and file formatting.

Prerequisites: (COMM 235<sup>C</sup> or COMM 201<sup>C</sup>) and COMM 110<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 405 - Global Media**

An examination of different regions of the world and their media systems. The course will explore how politics, economics and culture play a role in shaping global media structures. Both historical and contemporary perspectives on the topic are addressed, particularly as they relate to issues of democracy, cultural autonomy, political rights, social justice, media systems of different world regions, global representations in U.S. media, new technologies and developments in global technology and economic media developments.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 407 - Social Media Network Analytics**

COMM 407 examines the core concepts of social media networks and the process of collecting, analyzing, measuring, and visualizing data for organizations and businesses. The course emphasizes understanding the role of theories in social media analytics and the tools that help collect and analyze social media data and prepare reports. Students learn and work on data analytics software in this advanced-level course for their assignments and projects.

Prerequisite: COMM 307<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

**COMM 410 - Communication Law**

Discussion of topics related to the field of mass communication (freedom of the press, libel, invasion of privacy, copyright, obscenity, regulations, ethics, and responsibility of the communicator and the agency).

Credits: 3

Term(s) Typically Offered: Offered Every Term

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

**COMM 413 - Communication Theory**

A study of the significant theories of human communication that help to explain and predict the role of communication in determining the social, cultural, and political behavior of the community.

Prerequisite: COMM 110<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 415 - Persuasion**

This course will familiarize students with the processes of persuasion, the relationship of persuasion to other forms of human communication, methods for studying persuasion, the theories of persuasion and ethical concerns about persuasion. The perspectives and tools developed in this course should enable the student to develop effective message strategies in work and personal situations.

Prerequisites: COMM 110<sup>D</sup> and COMM 200<sup>D</sup> and COMM 110<sup>C</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 419 - Propaganda: Ideology, Communication Warfare, and Social Control**

The purpose of this course is to enhance the critical thinking and analytical skills of students to make them better able to cope intellectually with public argument in a world of where sound-bites and terrorism rule the day. This course addresses the ways in which various ideologies compete for global dominance by employing advocacy strategies and propaganda techniques, a process made both more complex and more consequential by rapidly advancing communication technologies. By manipulating visual imagery, propagandists often exert control over the public's perception of political, social and economic reality. Extensive use of art and video examples will be made in this course.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Citizenship & Social Problems, Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 422 - History of Journalism**

Tracing the history of American journalism from its early English European heritage to modern times. Emphasis on people, organization, and media that have helped establish the press as an American institution.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**COMM 431 - PR and IMC Campaigns Capstone**

Capstone course in the PR, IMC and Health Communication concentrations. Course provides students a thorough experience in conducting public relations and integrated marketing communication campaigns and preparing communication materials. Working in teams, students prepare and conduct the research, planning, implementation and evaluation of an actual campaign for a client.

Prerequisites: (COMM 332<sup>D</sup> or COMM 336<sup>D</sup> or COMM 370<sup>D</sup>) and COMM 333<sup>C</sup> and COMM 110<sup>C</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**COMM 434 - Advertising Production**

Advanced production course which applies concepts of design, creative strategy and message development to the creation of advertising in a variety of mediums. Course focuses on development of consumer, public service and public relations advertising campaigns.

Prerequisites: (COMM 235<sup>D</sup> or COMM 232<sup>D</sup>) and COMM 110<sup>C</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**COMM 441 - Issues in Journalism**

An analysis and discussion of the impact of journalism on contemporary society. Among the subjects discussed will be the evolution of journalism in a digital age, ethical concerns for modern journalists, and the impact of mobile technology on the practice of journalism.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 449 - Communication Projects**

This course provides students an opportunity to investigate in-depth, approved topics in applied communication.

Prerequisite: COMM 110<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 450 - Internship**

Supervised placement or research in selected private or public agencies.

Prerequisite: COMM 310<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1-12

Term(s) Typically Offered: Offered Every Term

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**COMM 453 - Media Project Management**

This course is intended to develop student mastery of the emerging environment of digital information through a project-based, team-based course. The course focuses on issues of team work, project management, strategy development and communication both inside and outside of the team. Other topics include budgeting, development of human capital, leadership, time management and legal issues.

Prerequisites: COMM 258<sup>D</sup> and (COMM 307<sup>D</sup> or COMM 347<sup>D</sup>) and (COMM 359<sup>D</sup> or COMM 401<sup>D</sup>) and COMM 110<sup>C</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 454 - Live Broadcast Production**

This course will teach students visual aesthetic principles and technical skills required to produce live programming and graphics for broadcast. Course topics include objective development, composition, element layering, branding, and advanced multi-camera studio and field production.

Prerequisites: (COMM 235<sup>D</sup> or COMM 201<sup>D</sup>) and COMM 350<sup>D</sup> and COMM 354<sup>D</sup> and COMM 110<sup>C</sup>

<sup>D</sup> Requires minimum grade of D.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 455 - History of Broadcasting**

A focus on the history and development of radio and television broadcasting in the United States. Students will watch and listen to historical broadcasts and discuss the evolution of entertainment and news programming from the beginning of the 20th century through today.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 458 - Media Criticism**

A critical examination of film, television, and radio. The course focuses on the formation and application of standards for appraising media and their messages.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Thematic Thread(s): Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 459 - Issues in Communication Technologies**

An exploration of current and emerging communication technologies including their development and regulation, as well as the social, individual and ethical impact of these technologies.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 464 - Advertising Campaigns Capstone**

This course is a capstone course in the Advertising program. Students will demonstrate how the knowledge and skills learned in their program can be applied directly to designing and developing creative advertising campaigns. Students will be responsible for conducting research, strategic planning, writing creative briefs, planning and preparation of advertising copy and design, and campaign evaluation.

Prerequisites: COMM 228<sup>D</sup> and COMM 235<sup>D</sup> and COMM 310<sup>D</sup> and COMM 434<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Senior 1 or Senior 2.

Enrollment is limited to students with a program in Advertising.

**COMM 480 - The Communication Age**

Presentation and discussion of the influences, trends, and issues that permeate the evolution toward a 'Communication Age'. Major issues and influences are examined, including significant technological developments and solutions that have been applied to communication needs and opportunities. Discussion addresses marketplace forces; humanistic, social, personal, and ethical issues; and the impact on organizations, workplace, home, education, government, and international functions. Major attention is given to the role of the impact on the individual amidst these far-reaching changes.

Credits: 3

Term(s) Typically Offered: Offerings Vary

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Institutions & Human Innovations, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**COMM 497 - Senior Capstone Seminar**

The seminar is designed to assist students develop career awareness and proficiency in career/job search skills relevant to obtaining an entry-level position in a communication-related field, or to obtain entry to graduate study. Students enrolled will participate in career development activities, including portfolio development, job seminars, establishing credential files, participating in mock and actual interviews, on-site mentoring/shadow program and public presentation of their portfolio.

Prerequisite: COMM 110<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may **not** enroll.

Enrollment limited to students with department of Strategic Comm and Media.

**COMM 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisite: COMM 110<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Theatre (THEA)

### THEA 130 - Art of Theatre

This course will use elements of theatre - acting, playwriting, directing, producing, design and technology – to illustrate how the arts connect to the culture and community in which they exist. Historical trends and the role of the arts in society will be a focus. This course is designed to guide students toward a lifelong curiosity about the arts. A lecture course; no performance skills required. Studying and experiencing the arts, including dance, music, theatre, and the visual arts, develops creative and aesthetic abilities. The arts introduce students not only to artists and their creations, but also to history, cultures, values, technique, imagination, creativity, and issues relevant to society. Students will gain an understanding of the creative process and how to analyze and interpret message and meaning in works of art. While the arts can bring us pleasure, they can also serve to enlighten and illuminate critical issues, lead to personal discoveries, and foster innovation in all fields. Students will learn to think critically about the arts, develop an appreciation for artistic creations, and by viewing live performances and exhibitions, become engaged audience members. Arts inquiry courses use and develop the analytic and interpretive modes of inquiry needed to understand and explore both tangible and abstract artistic works and the cultures in which they exist. In arts inquiry courses, students confront a variety of cultural and artistic expressions in order to gain an understanding of the human condition, and ultimately express their relationship to artistic work, meaning, and the creative process. Attendance at arts events will be required during this course and may require a fee.

Credits: 3

Term(s) Typically Offered: Offered Every Term

### THEA 131 - Fundamentals of Acting

An introduction to the theory and practice of acting.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course

### THEA 132 - Stagecraft

Fundamentals of modern set construction, stage lighting, properties, and costume practice. Students assist with current productions in laboratory sessions.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course

### THEA 139 - Foundations of Academic Discovery

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

### THEA 142 - Wellness for the Actor

Wellness for the Actor is a foundation class that establishes a physical, mental, and emotional wellness practice that supports advanced training in voice, movement and acting. In the course students will learn to: foster fuller breathing to connect body and mind as a practice for grounding and centering; create a stronger and more versatile physical body; learn physical conditioning practices; gain experience calming the mind and emotional body; study the practice of personal nutrition to enhance general health; and develop their ability to become attuned and connected to their physical self.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students in the BFA 5390 program.

Enrollment limited to students with department of Theatre.

### THEA 145 - Musicianship for Musical Theatre

This course focuses on the development of vocal performance techniques through training in aural and sight-singing skills including solfege, rhythmic notation, ear training, tempo, meter and dictation. Students will expand their understanding of harmonic progression, body alignment, muscle memory, and technical accuracy. Basic piano skills will also be covered.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment is limited to students with a program in Musical Theatre.

Enrollment limited to students in the BFA 5390 program.

### THEA 146 - Class Voice For Musical Theatre

This course focuses on musical theatre singing technique, skills, and styles for entry-level performers. In addition, the course is designed to familiarize students with industry practices in the field of professional musical theatre performance. Students become familiar with basic concepts of voice production as well as developing an understanding and awareness of vocal health issues. Additionally, students are exposed to a variety of musical theatre popular sung repertory while they are encouraged to develop perceptive listening skills by interacting and responding to their peers in class.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment is limited to students with a program in Musical Theatre.

Enrollment limited to students in the BFA 5390 program.

Enrollment limited to students in a Bachelor of Fine Arts degree.

Enrollment limited to students in the College of Liberal Arts college.

**THEA 151 - Rehearsal and Production**

Supervised experience in theatre performance and stagecraft by acting or crew participation in one Department of Theatre production. Prospective actors will have to participate in a competitive audition. May be repeated for a maximum of 12 credits.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

**THEA 159 - Introduction to Theatre Arts Management**

This course covers the basic principles, theories, concepts, processes, and practices relating to organizations in the arts industry, with a focus on the theatre industry. Topics include the structure of arts industries, organizational structures, leadership, staffing, volunteerism, fund raising, intellectual property, grants writing, advocacy, etc.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Thematic Thread(s): Institutions & Human Innovations, Transfer Thread Completion Course

**THEA 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**THEA 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**THEA 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**THEA 215 - Drawing/Drafting/CAD**

Principles and techniques used for the creation and implementation of theatrical designs. Introduction to design elements and techniques, drawing, rendering, and computer-aided drafting. Emphasis on set, costume, lighting and property designs.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course

**THEA 222 - Acting II**

Intermediate-level course designed to continue the actor training begun in THEA 131. Emphasis on realistic acting techniques.

Prerequisite: THEA 131<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**THEA 235 - Costume Technology**

Basic techniques of constructing costumes for the stage, emphasizing sewing, pattern making and cutting, draping. Includes the study of fabrics, millinery, and accessories.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course

**THEA 244 - Acting for Song I**

A course designed to synthesize the process of acting through song. Students will apply various acting and singing methodologies to connect to the emotional, physical and vocal requirements of both character and song.

Prerequisites: THEA 145<sup>C</sup> and THEA 222<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

Enrollment is limited to students with a program in Musical Theatre.

Enrollment limited to students in the BFA 5390 program.

Enrollment limited to students with department of Theatre.

**THEA 246 - Private Musical Theatre Voice**

Students will continue to develop musicianship, sight singing and vocal skills through individualized training designed to match their vocal range and skills. Repeatable up to 6 credits.

Prerequisites: THEA 145<sup>C</sup> and THEA 146<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Enrollment is limited to students with a program in Musical Theatre.

Enrollment limited to students in the BFA 5390 program.

Enrollment limited to students in the College of Liberal Arts college.

**THEA 254 - Musical Theatre Dance I**

Musical Theatre Dance I will introduce the students to the fundamentals of dance for musical theatre performance, including jazz, tap, ballroom, and hip hop. Students will learn correct alignment and techniques applicable to all musical theatre genres, and apply those principles to the dance styles found within those genres.

Prerequisite: DANC 125<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 2

Term(s) Typically Offered: Offered as Needed

Enrollment is limited to students with a program in Musical Theatre.

Enrollment limited to students in the BFA 5390 program.

**THEA 269 - Playwriting**

An introduction to the fundamentals of playwriting, including clear storytelling, character development, scene structure and style. The particular demands of writing in a theatrical medium, as distinct from film, television or novel, will be emphasized.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course

**THEA 281 - Survey of Dramatic Literature I**

Analysis and discussion of some of history's most celebrated works of dramatic literature, ranging from classical drama to drama of the eighteenth century. Texts will be examined within the historical context of the cultures that produced them, and in light of their respective theatrical conditions, performance styles, etc. Emphasis will also be placed on various methods of textual analysis.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

**THEA 283 - Survey of Dramatic Literature II**

Analysis and discussion of some of history's most celebrated works of dramatic literature, ranging from the early 18th century to the most exciting and groundbreaking contemporary drama. Texts will be examined within the historical context of the cultures that produced them, and in light of their respective theatrical conditions, performance styles, etc. Emphasis will also be placed on various methods of textual analysis.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**THEA 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**THEA 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**THEA 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**THEA 303 - Acting III**

Acting III is an advanced-level course designed to give the performer facility with the acting approach known as Meisner Technique.

Prerequisite: THEA 222<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

Enrollment limited to students in the BFA 5390 program.

Enrollment limited to students with department of Theatre.

**THEA 304 - Acting for Song II**

A continuation of Acting for Song I. Students will undergo advanced study in synthesizing the process of acting through song. Students will apply advanced acting and singing methodologies to connect to the emotional, physical and vocal requirements of both character and song.

Prerequisite: THEA 244<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

Enrollment is limited to students with a program in Musical Theatre.

Enrollment limited to students in the BFA 5390 program.

Enrollment limited to students with department of Theatre.

**THEA 322 - Acting Technique**

An intensive focus on one or more of the following: role preparation, scene study, physical disciplines of acting. Approach varies from offering to offering. May be repeated for credit three times.

Prerequisite: THEA 222<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 324 - Stage Makeup**

Theory, practice, and materials of stage make-up. Practical application is mandatory and extensive; students will analyze various characters and design makeup for them.

Prerequisites: THEA 131<sup>D</sup> and THEA 151<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 328 - Acting Shakespeare**

An advanced-level course designed to provide the student with tools for the analysis and performance of the plays of Shakespeare.

Prerequisite: THEA 222<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 329 - Shakespeare Tour**

An ensemble composed of actors and technicians, selected by audition and interview, performing Shakespeare-based scripts in the community and region. May be repeated twice for credit.

Prerequisite: THEA 328<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.



**THEA 330 - Voice and Movement for the Actor**

Introduction to disciplines of voice and movement essential for the well-prepared actor. Emphasis will be on performance rather than theory.

Prerequisite: THEA 131<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 332 - Advanced Stagecraft**

Advanced methods and materials of stagecraft: emphasis on furniture, metals, projected scenery, unusual rigging situations, hydraulics, computer applications, and special effects.

Prerequisite: THEA 132<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 333 - Scene Design**

The principles and application of design for stage, emphasizing sketches, diagrams, drafting, and model making.

Prerequisite: THEA 215<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 334 - Stage Lighting**

The theory and practice of stage lighting as practiced in modern theatre.

Prerequisite: THEA 215<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 335 - Costume Design and History**

A survey of costume history from the ancient world to the present with an emphasis on social, political, religious, and technological conditions. The process of costume design will be explored using the principles of variety and order, character analysis, period research, and the elements of design.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Even

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 337 - Directing**

The theory and practice of directing for the modern theatre.

Prerequisites: THEA 131<sup>D</sup> and THEA 132<sup>D</sup> and THEA 151<sup>D</sup> and (THEA 281<sup>D</sup> or THEA 283<sup>D</sup>)

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 339 - New Play Development**

This course is designed for actors, directors, and designers to learn how to collaborate with a playwright on a new work and to successfully mount a production of this new work. Students participate through a collaborative process of rehearsal and design, problem-solving and experimentation. Class culminates in a public performance on campus and perhaps another local venue. Student should be a theatre major. Permission of instructor via audition or portfolio review.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students with department of Theatre.

**THEA 340 - International Theatre Experience**

This course is designed for actors, designers and public relations students to create, design and market a production for overseas performance. Students participate through a collaborative process of rehearsal and design, problem-solving and experimentation. Students will also have the opportunity to participate in theater activities involving international performance groups. Class culminates in a public performance both on campus and overseas. Permission of instructor via audition or portfolio review.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students in the BA 5 92 program.

**THEA 342 - IPA/Dialects**

A course designed to train actors in phonetics, diction and dialects. Students will learn the International Phonetic Alphabet and master its use for Standard American English stage diction, as well as a variety of national variants and foreign dialects, through both phonetic notation and performance of dramatic texts.

Prerequisites: THEA 143<sup>C</sup> or THEA 353<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students in the BFA 5390 program.

**THEA 344 - Auditioning**

Students will learn techniques designed to develop skills in auditioning for theatre productions. Over the course of the semester, students will prepare a diverse repertoire of audition material, including classical and contemporary, as well as dramatic and comedic monologues. Cold readings, appearance and attire, and interview skills will also be covered.

Prerequisite: THEA 303<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment limited to students in the BFA 5390 program.

**THEA 345 - Stage Management and Safety**

Safe and effective production management on the modern stage. Safety education in shop, performance, and public spaces.

Prerequisite: THEA 132<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 347 - Auditioning for Musical Theatre**

This class will explore personal relationships between performer and song as well as develop reading skills to learn performance readiness. Active performance and application of feedback are core to this work, as well as understanding techniques and the vocabulary of a musical theatre audition. Students will learn how to choose well-suited songs and develop an audition book comprising of different styles.

Prerequisites: THEA 304<sup>C</sup> and THEA 303<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Musical Theatre.

Enrollment limited to students in the BFA 5390 program.

**THEA 348 - Musical Theatre Repertory**

Musical Theatre Repertory is an advanced-level course designed to provide the musical theatre performer with a series of individually-tailored audition pieces, while also providing a thorough grounding in the historical background and stylistic demands of the various musical theatre genres. Students will develop solo performance pieces drawn from all major musical theatre styles, including "golden age," contemporary, rock, hip-hop, etc.

Prerequisite: THEA 244<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Musical Theatre.

Enrollment limited to students in the BFA 5390 program.

Enrollment limited to students in the College of Liberal Arts college.

**THEA 351 - Movement for the Actor**

Movement for the Actor is an advanced-level course designed to facilitate and develop expressive, responsive movement in the stage performer. In addition to learning a battery of stretching and strengthening exercises, the student will explore physical character development through approaches such as Feldenkrais, "authentic movement" and Chekhov Technique.

Prerequisite: THEA 303<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

Enrollment limited to students in the BFA 5390 program.

**THEA 353 - Voice for the Actor**

Voice for the Actor: A study of breath and vocal work that will inform explorations to develop awareness of the voice and body and how that connects to vocal energy. This will foster breath support, range and stamina. Students will learn the basics of vocal anatomy as well as develop skills for healthy vocal usage.

Prerequisite: THEA 303<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

Enrollment is limited to students with a program in Theatre or Acting.

Enrollment limited to students in a Bachelor of Arts or Bachelor of Fine Arts degrees.

Students in the College of Liberal Arts college may **not** enroll.

**THEA 354 - Musical Theatre Dance II**

Musical Theatre Dance II will continue the exploration of jazz, tap, ballroom and hip hop dance begun in Musical Theatre Dance I. This second level technique course will continue to refine the student's skills in performance and stylistic techniques.

Prerequisite: THEA 254<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 2

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2, Sophomore 1 or Sophomore 2.

Enrollment is limited to students with a program in Musical Theatre.

Enrollment limited to students in the BFA 5390 program.

**THEA 355 - Projects in Theatre**

The study and performance of a major role in a Department of Theatre production, or participation in a production as a crew head with significant responsibility, or planning and execution of a study of moderate scope in the history, literature, or criticism of the theatre. May be taken for credit four times for a maximum of 6 credits. Junior standing and permission of the instructor.

Credits: 1-2

Term(s) Typically Offered: Offered Fall & Spring Terms

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 359 - Studies in Audience Development**

An advanced-level course focusing on audience development strategies for arts institutions.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Even

Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course, United States in Global Context

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 369 - Advanced Playwriting**

An advanced class devoted to building upon fundamental skills learned in Playwriting (93 269), such as characterization, plot structure, exposition, etc.

Prerequisite: THEA 269<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 370 - Playwriting Genres and Styles**

An advanced class devoted to exploring one or more of the following advanced topics: playing genres, devised theatre, documentary theatre, non-realistic writing, non-traditional structures and forms.

Prerequisite: THEA 369<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 372 - Senior Seminar in Playwriting**

An advanced-level seminar for senior playwriting majors, in which major playwriting projects are shared and developed.

Prerequisite: THEA 369<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum. Permission of instructor via audition or portfolio review.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 392 - History of Musical Theatre**

This survey course will explore the historical use of music in drama with a focus on the invention, development and masterworks of the American musical genre. Major genres, composers, lyricists, librettists, directors, choreographers, and performers will be discussed. The socio-historical context of various musicals will be explored through the literature of the genre.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 393 - History of Theatre Design and Architecture**

A review of the history and evolution of scene, costume, lighting, prop and sound design for the theatre. Course will also examine the evolution of theatre spaces, from the outdoor theatre of the Ancient Greeks to traveling wagon stages of the medieval period to modern architectural trends. The course will examine non-western forms of theatre such as aboriginal and African theatre as well as western world theatre traditions.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms Odd

Thematic Thread(s): Cultural Literacy & Community Building, Conservation, Technology & Imagination, Transfer Thread Completion Course

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 394 - Theories of Acting and Directing**

A history of the art, craft and theories of acting. Also, a historical investigation into the role of the "director" in pre-modern theatre and the evolution into its present predominant place in contemporary theatre.

Prerequisites: THEA 281<sup>D</sup> or THEA 283<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms Odd

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 425 - Professional Theatre Practice**

A study of the working conditions of the professional actor, designer, technician, and director in the contemporary theatre. Preparation for effective career development.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may **not** enroll.

**THEA 442 - Senior Showcase**

This course is designed to give each graduating BFA Acting student the opportunity to prepare for and perform in a showcase as a step towards establishing their professional career. The showcase will invite theatre professionals such as agents, producers, casting directors, and directors to attend and will be presented in a major metropolitan area and on campus. The course also builds on the foundational practices of working in professional theatre. Professional headshots will be required.

Prerequisites: THEA 344<sup>C</sup> or THEA 347<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students in the BFA 5390 program.

Enrollment limited to students with department of Theatre.

**THEA 450 - Internship**

Supervised placement in a working theatre situation off campus.

Extensive and successful experience in theatre performance on campus, 2.000 GPA overall and in all theatre courses attempted, and permission of the department's curriculum committee.

Credits: 1-12

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 490 - Independent Study**

A faculty-supervised project in an advanced area of theatre studies carried out independently by a qualified upper-class student. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**THEA 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## The University

## The University

Slippery Rock University of Pennsylvania, one of 14 state-owned institutions that comprise Pennsylvania's State System of Higher Education, has a long tradition of providing quality education to students. Started in 1889 as a teacher education institution, the university developed into a multi-purpose institution with approximately 8,500 students and with approximately 135 programs in the College of Business, College of Education, College of Engineering and Science, College of Health Professions and College of Liberal Arts.

## Vision

Slippery Rock University will excel as a caring community of lifelong learners connecting with the world.

## Mission

The fundamental educational mission of Slippery Rock University (SRU) is to transform the intellectual, social, physical, and leadership capacities of students in order to prepare them for life and career success. Complementary missions are to engage in scholarly activity and professional service.

SRU is committed to serving a diverse student body and empowering anyone regionally, nationally, and internationally who can benefit from its programs and lifelong learning opportunities. Thereby SRU addresses the educationally-related economic, health, environmental, social, cultural, and recreational needs of the communities served by the university.

In pursuit of SRU's educational purpose, talented faculty and staff provide creative integrated curricula and experiences that are connected to the world in which graduates will work and live. Students are taught using powerful and engaging pedagogies in appropriate learning spaces employing state-of-the-art technology. They study in an open, caring, nurturing, and friendly environment, and live in a safe community with access to high-quality student services. SRU strives to be a best-value institution with an affordable cost and substantial student financial support.

## Core Values

### Student Success

We value students as the center of all that we do and support a climate that celebrates each person's success. We believe that, as a public regional university, our role is to transform our students to enable them to be economically and socially mobile.

### Excellence

We value excellence in teaching, research, scholarship, creative endeavors, student services and in all aspects of the University's operations to ensure institutional effectiveness and efficiency. We value

excellent curricula and co-curricular experiences, together with high expectations of our students, in order to stimulate student success.

## Intellectual Freedom, Integrity and Free Expression

We value and uphold the right of all in our academic community to speak and write freely. We expect all who study, teach and work within the University to uphold the highest ideals of scholarly responsibility. We value honesty, integrity, fairness, and respect in creating, debating and disseminating intellectual and creative works. As such, we believe that all perspectives deserve fair scrutiny in the marketplace of ideas in a civil, fair and thoughtful manner.

## Innovation

We value the discovery and application of knowledge in teaching and learning and in developing innovative systems. We believe in offering educational programs that anticipate future needs, teach state-of-the-art competencies and use modern evidence-based pedagogies. We strive to promote and adopt productive cutting-edge curriculum, technology, structures and processes throughout the enterprise.

## Diversity, Inclusion and Equity

We value a diverse campus community that enriches our students' intellectual and social growth. We strive to build and support a community that fully reflects the rich diversity of the commonwealth. We welcome all qualified individuals to SRU and will work to ensure that our enrollment, employment and advancement processes are open, unhindered and free of barriers. We seek an inclusive campus and equitable outcomes for students and employees alike. More information available here (<https://www.sru.edu/life-at-sru/diversity-equity-and-inclusion/>).

## Openness, Shared Governance and Accountability (Combines Two Concepts)

We value shared decision making and promote a campus culture in which information is widely shared, broad participation is encouraged, decision making processes are clear and feedback is valued. We uphold our commitments to shared governance. We value transparency of information and process, collaboration in resolving significant issues of mutual interest and ethical decision-making. We will be publicly accountable for the quality of our work and will seek to steward University resources effectively.

## Social Responsibility

We value the importance of fostering citizenship to promote the public good, environmental sustainability, global understanding and informed civic engagement. We will leverage our intellectual and financial resources in order to educate our students and the public about sustainability, global awareness and civic responsibility and operate the University as sustainably as possible.

## Accreditation

Slippery Rock University is accredited by the following accrediting agencies:

### Institutional Accreditation

Middle States Commission on Higher Education (MSCHE)

### Nonacademic ACCREDITATION

Accreditation Association for Ambulatory Health Care, Inc. (AAHC)

International Association of Counseling Services (IACS)

Professional Association of Therapeutic Horsemanship International (PATH INTL)

## College of Engineering and Science

Accreditation Board for Engineering and Technology (ABET)

American Chemical Society (ACS)

Commission on Accreditation of Athletic Training Education (CAATE)

North American Association for Environmental Education (NAAEE)

## COLLEGE OF health professions

Accreditation Council for Occupational Therapy Education (ACOTE)

Accreditation Commission on Collegiate Nursing Education (CCNE)

Accreditation Review Commission on Education for the Physician Assistant, Inc. (ARC-PA)

American Physical Therapy Association (APTA)

- Commission on Accreditation in Physical Therapy (CAPTE)

Commission on Accreditation of Allied Health Education (CAAHEP)

- Committee on Accreditation of Recreational Therapy Education (CARTE)
- Committee on Accreditation of Exercise Sciences (CoAES)

Commission on Accreditation of Athletic Training Education (CAATE)

Council on Social Work Education (CSWE)

## College of Education

Council for the Accreditation of Educator Preparation (CAEP)

National Program Recognitions

- National Association for the Education of Young Children
- Council for Exceptional Children
- National Council of Teachers of English
- National Council of Teachers of Mathematics
- National Science Teachers Association
- National Council for the Social Studies

Pennsylvania Department of Education (PDE)

## College of Business

Association to Advance Collegiate Schools of Business (AACSB)

Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM)

Commission on Sport Management Accreditation (COSMA)

## College of Liberal Arts

National Association of Schools of Art and Design (NASAD)

National Association of Schools of Dance (NASD)

National Association of Schools of Music (NASM)



National Association of Schools of Theatre (NAST)

## Institutional Assessment

Assessment is the process through which effective learning is planned and measured by relating degree program goals to actual student performance. We do assessment to improve student learning. The Assessment Core Committee of Slippery Rock University has been working since 1998 to help the University community develop effective assessment processes. The web site reflects the collective efforts of both academic and student life programs to articulate student-learning outcomes and to devise appropriate and effective means of measuring student achievement.

More information on assessment can be found at here (<https://www.sru.edu/offices/academic-affairs/assessment/>).

## Location

Slippery Rock University's campus is located in Slippery Rock, a borough in northern Butler County, Pennsylvania, that is a safe and friendly community of approximately 3,500 residents. SRU is less than an hour's drive north of Pittsburgh, one hour south of Erie and 45 minutes east of Youngstown, Ohio. Two major interstate highways, I-79 and I-80, intersect seven miles from the University, making the campus easily accessible.

## Students

Three quarters of SRU's more than 8,800 students are from western Pennsylvania, including the largest number of students hailing from Pittsburgh and other cities in Allegheny County. Another 13% of students come from central and eastern Pennsylvania. The remaining 11% are out-of-state students, as students from 43 states and 30 countries are represented among the student population.

## Faculty

The approximately 453 full- and part-time faculty members at SRU are teachers, scholars and contributors to the University and community. The typical faculty member teaches four undergraduate courses each semester, engages in scholarly research and creative endeavors and serves in a variety of decision-making roles. Of the current full-time tenured or tenure-track faculty, 48% are male and 52% are female and 19% are members of minority racial and ethnic groups. In addition, 91% of all full-time faculty are tenured or occupy tenure-track positions, and 94% of full-time tenured or tenure-track faculty have earned a doctoral or other terminal degree.

## Campus

SRU's gorgeous 660-acre campus is located in the rolling countryside of western Pennsylvania. More than 30 major buildings and 64 total facilities, which blend traditional and modern architecture, contributes to an optimal living and learning environment.

Bailey Library supports the University's mission by developing collections and services that make the library integral to the learning process, both within and beyond the classroom. SRU has completed a multiphased renovation of the library to better serve the needs of the 21st century student. Services and resources include, but are not limited to, personal librarians; holdings which include print and electronic books, government documents, print and electronic journals, newspapers, DVDs, audio books, archival records and special collections; group and individual learning spaces for scholarly work and recreational reading; interlibrary loan and document delivery services; the Technology Learning Center;

the Instructional Materials Center; and University Archives and Special Collections Room.

Other facilities include Swope Music Hall, designed as both a performing and learning center; Vincent Science Center, with laboratories, classrooms and a greenhouse; and Morrow Field House, an instructional and recreational facility that houses a gymnasium, swimming pool, handball court, dance studio, tennis court and track. McKay Education, Spotts World Cultures and Eisenberg Classroom buildings are examples of standard educational facilities that have small and large classrooms, auditoria and other specialized classrooms.

Buildings erected since 2001 include the School of Physical Therapy Building and the Advanced Technology and Science Hall, which houses the Computer Science; Chemistry; and Geography, Geology and the Environment departments. Recent renovations include the Strain Safety Building, which underwent a \$6.5-million upgrade in 2018 and the Performing Arts Complex which underwent a \$29.2-million renovation and reopened in 2021. The University opened the Harrisville Building in 2016 in nearby Harrisville, Pennsylvania, to house the physician assistant and occupational therapy programs.

Students reside in eight on-campus residence halls: six newer buildings housing students on the lower end of campus and two traditional halls located on the upper end of campus. Additionally, upperclass students can reside at the ROCK Apartments, an eight-building complex with 188 beds. Privately owned residence halls, apartments and other types of living accommodations are available off-campus.

There are two dining halls, Boozel and Weisenfluh, as well as dining options including Starbucks and Quaker Steak and Lube inside the 107,000-square-foot Smith Student Center. That building also houses a ballroom, theater, book store, conference rooms, a bank branch and other offices and amenities.

## Campus Resources and Services

For information about resources and services at Slippery Rock University, please visit the Campus Resources and Services page (p. 1445).

## Admission

Students are admitted to Slippery Rock University of Pennsylvania for the fall semester, winter term, spring semester, or a summer term. The university calendar should be consulted for specific starting dates. Applicants are considered for admission on a rolling basis. Criteria and deadlines used to determine admission to the university are defined by an applicant's admission category. Admission to the university may be subject to space availability and criteria used for admission to the university are subject to change.

- First-year Applicants (p. 1442)
- Transfer Students (p. 1442)
- Post-Baccalaureate Students (p. 1442)
- Non-Degree Student Admission (p. 1443)
- Transient Students (p. 1443)
- Visiting Students (p. 1443)
- Faxed Transcripts/Documents (p. 1444)
- Student Right-to-Know and the Clery Act (p. 1444)
- International Students (p. 1444)

# First-Year Applicants

## First-Year Applicants

Any high school graduate (or anyone who will be a high school graduate prior to attendance) or anyone who has passed the General Educational Development test (GED) who has not yet enrolled at a college, university, or other post secondary educational institution and intends to enroll at Slippery Rock University to pursue a degree granting program shall apply for admission as a new first-year student. Students who enroll in dual-enrollment college credit programs prior to high school graduation are still considered new first-year students.

### Admission Guidelines for New First-Year Students

New first-year students are admitted to Slippery Rock University on a rolling basis for all terms. Admission criteria used to evaluate an applicant usually include the student's previous academic record. Slippery Rock University adopted a test-optional admissions policy for new students entering Fall 2021 and beyond. Admission guidelines are based upon the academic profiles of previously successful students. First-time, full-time students (new first-year students) who succeed most often at Slippery Rock possess a cumulative grade point average of 3.0 on a 4.0 scale in high school at the time of admission. Other students who apply may be asked to supply additional information and may be considered for admission on an individual basis using a Waitlist process. Additional admission criteria for applicants on the Waitlist may include: high school course rigor, grade trends, grades in core college preparatory courses and class rank (if available). Waitlisted applicants are offered admission on a rolling, space available basis and applicants closest to the academic guidelines are offered admission most frequently.

Slippery Rock University recommends that entering first-year students complete a college preparatory curriculum in high school consisting of four years of English; three years of social studies (with a fourth year recommended); three years of science with two years laboratory science; three years of mathematics (with a fourth year recommended, including algebra one, algebra two and geometry). Two years of a foreign language in the same language is preferred but not required.

### How to Apply for Admission as a New First-Year Student

Applicants need to supply the following credentials to apply for admission:

- A completed Application for Admission (admission applications are available through the Office of Undergraduate Admissions and via the web at [www.sru.edu](http://www.sru.edu) (<http://www.sru.edu>))
- A \$ 30.00 application fee (non-refundable) or fee waiver documentation
- Official high school transcripts or GED, and senior year (12th Grade) class schedule if enrolled in high school

Official transcripts are those that either 1) are sent directly from the school to Slippery Rock University's Office of Undergraduate Admissions, or 2) are delivered to Slippery Rock University's Office of Undergraduate Admissions in a sealed envelope from the school. No other transcripts will be considered official. Transcripts should reflect all grades up through the end of the junior year (six completed semesters). Final official high school transcripts documenting graduation from high school will be required upon graduation prior to the start of the initial semester of enrollment. Failure to document high school graduation will result in the revocation of admission.

Slippery Rock University recommends that official transcripts include a student's complete curricular and grading history, semester and cumulative grade/quality point averages (both weighted and un-weighted if weighting is practiced), and class rank if calculated. If the high school uses a percentage grading scale, any conversion guide to a 4.0 scale is also recommended. Home schooled students should supply transcripts of home school curriculum as well as any previous high school transcripts if applicable.

If an applicant is submitting a GED rather than a high school diploma, the GED documentation must be a copy of the diploma and include the official test results.

Credentials should be directed to the Office of Undergraduate Admissions at Slippery Rock University. Once all credentials are received, Slippery Rock University admits new first-year students on a rolling basis for all terms. Applicants who are offered admission must reply to Slippery Rock University to accept their offers of admission, along with submitting a required enrollment deposit, before they are considered matriculated. Admission offers not acted upon by making an enrollment deposit, are subject to rescission after May 1 of the students senior year of high school. New first-year students seeking admission for the fall semester are encouraged to apply early in the preceding fall prior to enrollment.

First-year admission is valid for the term it is offered, or any subsequent term for not later than one academic year, as long as a student does not enroll in college courses at another college/university. Students who enroll in college courses elsewhere must reapply for admission as a transfer student for the semester they wish to enroll in. Students wishing to defer admission should contact the Office of Undergraduate Admissions.

### First-Year Residence Requirement

All new first-year students are required to live on campus. First-year students living with their parents or legal guardian within a reasonable commuting distance may request a release from this requirement in order to commute from home. The Residence Life Housing Appeals Board will review all written requests for this exception.

## Transfer Students

### TRANSFER POLICIES AND CREDIT EVALUATION

To learn more about the transfer process at SRU, please visit the Transfer Admissions Website (<https://www.sru.edu/admissions/transfer-and-military-admissions/transfer-credit-evaluation/>).

## Post-Baccalaureate Students

Students who have earned a baccalaureate or higher degree from an approved institution may qualify for admission to earn additional undergraduate credit beyond their degree (see same title in College of Education).

Students interested in post-baccalaureate study may take course work for self-enrichment, may earn a second degree, a letter of completion or an academic certificate. Students pursuing an additional degree must earn a minimum of 30 credits at SRU beyond their first baccalaureate degree and meet all department requirements for the degree.

Post-baccalaureate students may not enroll at SRU to add a second major, minor, or other academic credentials to their undergraduate degree without meeting all requirements for a second degree.

Post-baccalaureate students interested in learning more about curriculum and degree requirements should contact the related academic department at the university. Questions regarding the actual application process should be directed to Transfer Admissions.

## Admission Guidelines for Post-Baccalaureate Students Seeking a Second Degree or Teacher Certification

A baccalaureate degree awarded from a regionally accredited institution of higher education is required. Certain programs, such as teacher certification and nursing programs, may require applicants to meet additional or more stringent admission criteria, including minimum Grade Point Average requirements. Interested applicants should contact those college or department offices for admission guideline information prior to applying for admission. Post-Baccalaureate students seeking to earn a second degree and/or teacher certification may be eligible for financial aid, and should contact the Financial Aid Office for further information.

### How to Apply for Admission as a Post Baccalaureate Student Seeking a Second Degree or Teacher Certification

The application process for the various categories of post-baccalaureate study varies. For additional information regarding the appropriate application process, refer to the Post-Baccalaureate Students link (<http://www.sru.edu/admissions/other-admissions/post-baccalaureate-students/>) on the admission page.

## Non-Degree Student Admission

A non-degree student is a student who does not possess a baccalaureate degree and wishes to enroll for undergraduate level credit coursework at Slippery Rock University for enrichment and does not intend to use the course work toward a degree program at an institution of higher education. Non-degree admission is valid for one semester at a time. Students who wish to enroll as non-degree students may reapply for admission for subsequent terms until a maximum of 30 semester hours have been completed, at which time further enrollment is precluded in the non-degree status. Non-degree students are not eligible for financial aid.

## Admission Guidelines for Non-Degree Student Admission

A non-degree student must be a high school graduate or have a GED to enroll. Non-degree student applicants sign a statement on the application for admission to that extent and have one semester of attendance to supply proof of high school graduation (generally either a high school transcript or GED). The Slippery Rock University Fast Track Program also offers admission as non-degree students to qualified high school students seeking to enroll at the University prior to high school graduation. Students interested in the Fast Track program should contact the Office of Undergraduate Admissions directly for more information.

## How to apply for Admission as a Non-Degree Student

Applicants need to supply the following credentials to apply for admission:

- A completed Non-Degree Application for Admission
- Non-Degree student applicants do not pay an application fee
- Unofficial high school transcripts with a graduation date posted (or GED) are required during the term of enrollment. Other credentials may be appropriate for special Slippery Rock University programs. Other transcripts may be required to meet specific course prerequisites.

Non-degree students must enroll and make payment by registration and fee payment deadlines as published in the class schedule for the term in which they wish to enroll.

## Transient Students

Any current undergraduate student from another regionally accredited institution of higher education who wishes to enroll for one semester at Slippery Rock University for credit course work while pursuing a degree program at their home college or university may apply for admission as a transient student. Transient students enroll for one term at Slippery Rock with the intent of returning to their home institution to pursue their degree. Only credits, not grades, return to the home institution. If you are attending one of the PASSHE institutions, and wish to transfer grades and credits back to the home institution, you should apply as Visiting Student status.

## How to Apply for Admission as a Transient Student

To apply for Transient Student admission, complete the online application and submit a copy (unofficial or official) of the transcript from the most recently attended college or university to the Office of Undergraduate Admissions; no application fee required.

Transient students must enroll and make payment by registration and fee payment deadlines as published in the Class Schedule for the term in which they wish to enroll.

Transient students are admitted through the Office of Undergraduate Admissions for all enrollment terms.

## Visiting Students

Any current undergraduate student from one of the other 13 member universities of the Pennsylvania State System of Higher Education who wishes to enroll for one semester at Slippery Rock University for credit course work while pursuing a degree program at their home college or university may apply for admission as a visiting student rather than a transient student. Visiting students enroll for one semester at Slippery Rock University with the intent of returning to their home institution to pursue their degree. Eligible students should contact the registrar or academic records office at their home institution to review visiting student grading policies prior to enrolling as a visiting student at Slippery Rock.

## How to Apply for Admission as a Visiting Student

Applicants need to supply the following credentials to apply for admission:

- A completed Visiting Student Application (<https://www.sru.edu/Documents/academics/academic-services/academic-records/Visiting%20Student%20Application.pdf?1481048695656>) for Admission

Visiting students must enroll and make payment by registration and fee payment deadlines as published in the Class Schedule for the term in which they wish to enroll.

Visiting students are admitted and processed through the Office of Academic Records and Registration.

## Faxed Transcripts/Documents

Transcripts and documents faxed to Slippery Rock University on behalf of students may be used unofficially for the purpose of initial review or for use with non-degree seeking student applicants. No final decision will be made pertaining to acceptance to the university or acceptance of transfer credit until the university receives the official transcripts. Faxed copies of GED certificates and Green Cards are acceptable.

**Note:** All credentials submitted to Slippery Rock University become the property of Slippery Rock University and will not be returned to the student or forwarded to third parties.

## Student Right-To-Know and the Clery Act

Notification of Availability of Student Consumer Information including:

- Clery Act
- Annual Security Report
- Freshman and scholarship athlete graduation rates
- Students' Rights of Privacy (FERPA)
- Student Financial Assistance
- Costs of Attending SRU
- Facilities
- Health and Safety Information
- Other information of importance to students

Slippery Rock University's Annual Security Report includes statistics for the previous three years concerning reported crimes that occurred on campus, in certain off-campus buildings or property owned or controlled by Slippery Rock University; and on public property within, or immediately adjacent to and accessible from the campus. The report also includes institutional policies concerning campus security, such as policies concerning alcohol and drug use, crime prevention, the reporting of crimes, sexual assault, and other matters.

View the Annual Security Report (<http://www.sru.edu/life-at-sru/safety/university-police/annual-security-report/>) or contact the Office of University Police at 724-738-3333.

View the Student Consumer Website (<https://www.sru.edu/students/student-consumer-information/>) or contact the Office of Academic Records and Registration at 724-738-2010.

## International Students

Slippery Rock University actively recruits international students from all over the world. Whether you are a first-time student, transferring, seeking a second bachelor's degree, exchange, or non-degree visiting student, the information that you'll want to consider and the tools that you need for the admission process can be found on the International Admissions Website (<https://www.sru.edu/admissions/international-admissions/>).

The deadline for submission of all application and supporting credentials is May 1 for fall admission and October 1 for spring admission. All applicants are considered automatically for financial aid.

For further information, please contact [international.admissions@sru.edu](mailto:international.admissions@sru.edu)

## Financial Aid and Scholarships

**Office:** 107 Maltby  
**Phone:** 724-738-2044  
**Email:** [financial.aid@sru.edu](mailto:financial.aid@sru.edu)

The Office of Financial Aid is responsible for the coordination of sources of financial assistance for undergraduate and graduate students at Slippery Rock University. The majority of financial aid offered through the Office of Financial Aid is based on the overall financial need of applicants. State, federal and institutional financial aid sources are coordinated through this office. The Office of Financial Aid also provides information about scholarship opportunities. A detailed listing of aid programs is available at The Office of Financial Aid (<http://www.sru.edu/admissions/financial-aid/>).

## Tuition, Fees, & Financial Policies

The Office of Student Accounts is responsible for tuition assessment, invoicing of charges, accepting payments, disbursing aid released from Financial Aid, and collections management.

Information on tuition and fees may be found online at the **Office of Student Accounts**.

By accepting admission to Slippery Rock University, the student agrees to pay the fees and charges assessed by the university. Tuition, fees and other charges are subject to change at any time. Students cannot enroll in classes, receive transcripts of coursework taken while at the university, or graduate from the university unless all fees are paid. Past due account balances are submitted to the Attorney General's office for collection. If any account is submitted to a collection agency to assist in collecting the account, the student is responsible for any/all collection costs associated with this account. Payment of fees can be made in a variety of ways either in full or through installment payment plans (fee involved).

Details regarding the student's acknowledgement of responsibility and terms and conditions are available in the Financial Terms and Conditions Agreement (<https://www.sru.edu/documents/offices/accounting-services/student-accounts/StudentTermsandConditions.pdf>).



## Campus Resources and Services

The university contributes to the development of the whole person by improving students' abilities to successfully manage challenges and by creating an environment in which students are likely to thrive, so that they are retained and graduate. The departments listed below exist to enhance the student experience and provide support for student success.

- Academic Honor Societies and Professional Organizations (p. 1445)
- Athletics (p. 1445)
- Bailey Library (p. 1445)
- Campus Recreation (p. 1445)
- Career Education and Development (p. 1446)
- Dining Services (p. 1446)
- Disability Services (p. 1446)
- Exploratory Studies and Academic Progress (ESAP) (p. 1447)
- Global Engagement (p. 1450)
- Grants and Sponsored Research (p. 1453)
- Honors College (p. 1453)
- Housing and Residence Life (p. 1454)
- ID Office (p. 1455)
- Inclusive Excellence (p. 1455)
- Leadership Development Program (p. 1455)
- Musical Organizations (p. 1456)
- Off-Campus Housing (p. 1456)
- Parking Office (p. 1456)
- Preschool Child Care Center (p. 1456)
- President's Commissions (p. 1456)
- Pride Center (p. 1456)
- Publications (p. 1456)
- Radio and Television (p. 1456)
- Special Recognition of Academic Achievement (p. 1457)
- Student Center and Conference Services (p. 1457)
- Student Conduct (p. 1457)
- Student Counseling Center (p. 1457)
- Student Engagement and Leadership (p. 1457)
- Student Health Services (p. 1458)
- Student Support (p. 1458)
- Success Coaching (p. 1458)
- Theatre Productions (p. 1458)
- University Advancement - Alumni Engagement (p. 1458)
- University Police (p. 1459)
- Veteran's Services (p. 1459)
- Women's Center (p. 1459)

## Academic Honor Societies and Professional Organizations

Slippery Rock University offers a number of academic and professional honor societies (<https://www.sru.edu/life-at-sru/student-activities/clubs-and-organizations/honor-societies/>) that recognize students who excel academically, or in their leadership, within specific disciplines. Honor society membership provides opportunity to interact with other students with similar academic and professional interests, as well as a co-curricular experience to enhance professional development. Log

into CORE (<http://sru.edu/core/>) to view a listing of SRU's active honor societies and professional organizations (<https://sru.campuslabs.com/engage/organizations/?branches=238143&categories=12980>). For more information contact the Office for Student Engagement and Leadership at 724-738-2092 or [leadership@sru.edu](mailto:leadership@sru.edu).

## Athletics

For information about the intercollegiate Athletics programs at SRU, please visit the Athletics Website (<https://rockathletics.com/>).

## Bailey Library

Bailey Library supports the mission of Slippery Rock University by developing collections and services that make the Library integral to the learning process, both within and beyond the classroom. The University has completed a multi-phased renovation of Bailey Library to enhance the facility and better serve the needs of the 21st century academic student.

### Services and resources include (but are not limited to):

- Personal Librarians
- Holdings which include print and electronic books, government documents, print and electronic journals, newspapers, DVDs, audio books, archival records and special collections
- Group and individual learning spaces for scholarly work and recreational reading
- Interlibrary loan and document delivery services
- The Technology Learning Center (TLC)
- The Instructional Materials Center (IMC)
- University Archives and Special Collections Room

For specific details and information, visit the Bailey Library website at <http://www.sru.edu/academics/bailey-library> (<http://www.sru.edu/academics/bailey-library/>).

Library hours of operation are posted on the Bailey Library web page (<https://www.sru.edu/academics/bailey-library/library-hours/>).

Bailey Library Faculty provide university faculty and students with research and references services for all courses and subjects in the Academic Catalog. Information on how to contact them may be found on the library website, or via Bailey Library's Ask A Librarian portal: <http://sru.libguides.com/aalportal> (<http://sru.libguides.com/aalportal/>).

### Bailey Library Contact Information

724-738-2058 (Main office)

## Campus Recreation

Campus Recreation facilities include the Aebersold Student Recreation Center (ARC), McFarland Outdoor Recreation Complex (MAC), Ski Lodge, Disc Golf Course, Campground, High Rope and Low Rope Courses. The ARC has a fitness center, 5 gymnasiums, indoor track, indoor climbing wall, swimming pool, group fitness studios, and pool patio. The MAC has 4 multi-purpose fields, 2 softball fields, and exterior lightning. The ski lodge has seating for 100 people and inside and outside fire pits. The campground has 5 sites with picnic tables and fire rings. These facilities are used for informal recreation and structured programming. Some of the major programs offered are personal training, group fitness, outdoor adventures, aquatics, intramurals, sport clubs, and REACH programming (high rope and low rope elements). For more information, please visit the



Campus Recreation Website (<https://www.sru.edu/life-at-sru/health-and-wellness/campus-recreation/>).

## Career Education and Development

108 Bailey Library  
724-738-2028

### Acting Director

John Rindy

### Associate Director

Renee Coyne

### Assistant Director

Jesse DeFazio

### Clerical Assistant

Lisa Theodorson

The Office of Career Education and Development encourages a four-year career development continuum so that students are developing professionally in their employment documents, their transferable skills, and their work related learning experiences, while they develop academically in the classroom. Ultimately, career staff members engage students in building their level of professionalism and self-knowledge, guiding them on a pathway to a meaningful and joy filled career. Basic services include major and career exploration, resumes, cover letters, interview preparation, graduate school applications, and professional network development. Extended support is available on topics such as personal budgets, understanding benefits, negotiating salary, relocating to a new area and understanding employment contracts. The career office also oversees the McKay Testing Center, a computer-based testing center which administers exams such as Praxis, MAT, and the GRE Subject tests. The career office provides access for all students to the Handshake career management system. Through Handshake students can schedule career appointments, register for the many job fairs and learning events led by the career team, search for full time jobs and internships, and search for on-campus jobs (which are managed by the Office of Payroll and Student Employment). The Office of Career Education and Development Website (<http://www.sru.edu/life-at-sru/career-education-and-development/>) provides more details about services and staff.

## Dining Services

The dining program at Slippery Rock University offers a variety of services throughout the campus for students and their guests. Food service is available at locations on campus from 7:00 a.m. to 12:00 midnight (Sunday through Thursday) and 8:00 a.m. to 10:00 p.m. (Friday and Saturday). Boozel Express is open 24/7 when school is in session.

**Weisenfluh Hall**, located across from the North Hall parking lot, features The Restaurants at Weisenfluh, developed to offer the campus community and guests an innovative dining experience. Butter & Honey and Crafted by Commonplace feature a variety of pastries, sandwiches, specialty coffee drinks and smoothies. Burgers + Fries offers gourmet burgers, chicken tenders and other grill favorites. Bento offers Asian cuisine and sushi. Dine in or purchase food to go. The facility provides lounge and table seating, wireless environment, student gathering spaces, and meeting rooms.

**Boozel Dining Hall**, located on the lower end of campus, provides a variety of menu options in a restaurant-style atmosphere. Food stations with

open kitchens offer made-to-order items along with home-style and international entrees, vegan/vegetarian and healthy choice options, deli and grille sandwiches, pizza and pasta, soup/salad, and a variety of desserts and beverages. True Balance provides daily menu features that avoid top allergens. This all-you-care-to-eat facility also features special events and holiday celebrations throughout the year. Boozel Express, located in the lobby of Boozel Dining Hall, offers quick-serve take-out options.

**Robert M. Smith Student Center**, located on lower campus, houses the following food service operations:

- Starbucks - a full-service store featuring breakfast items, pastries, sandwiches, Starbucks full beverage line, and merchandise.
- Rocky's - a food court offering Mexican cuisine, pizza/pasta, wraps, chopped salads, hoagies, and grab-n-go items.
- Quaker Steak & Lube - Western PA regional favorite, featuring their signature wings, burgers, and appetizers.

**Starbucks We Proudly Serve**, a coffee shop located in Bailey Library, features a selection of Starbucks beverages and various pastries and grab-n-go items. A walk-up window provides quick service for those students hurrying through the quad.

There are a number of meal plan options available to Slippery Rock University students. Students residing on-campus in either the traditional halls or residential suites are required to participate in the meal plan program with one of the designated on-campus meal plans. Meal contracts are optional for off-campus/commuter students and Rock Apartments residents.

For more information, please visit [www.sru.edu/dining](http://www.sru.edu/dining).

## Disability Services

105 University Union  
724-738-4877

### Director, Office of Disability Services

Dr. Natalie E. Burick

### Assistant Director, Office of Disability Services

Kim Coffaro

### Clerical Assistant

Suzanne Sandrock

### Email

[disabilityservices@sru.edu](mailto:disabilityservices@sru.edu)

The Office of Disability Services provides accommodations and services to ensure equal access to education as intended by Section 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act of 1990 (ADA) for students with disabilities including but not limited to learning, physical, hearing, vision or psychological disabilities. At Slippery Rock University we want all students to achieve academic success and are interested in making every effort to accommodate and serve students with disabilities. To be eligible for services, appropriate documentation must be provided. Documentation may include medical diagnosis, psychological evaluations, etc. Upon acceptance to Slippery Rock, students with disabilities are encouraged to make an appointment with the Director to schedule a personal interview. Also, students wishing to receive accommodations can start by filling out the public request link at:

[https://sru-accommodate.symlicity.com/public\\_accommodation/](https://sru-accommodate.symlicity.com/public_accommodation/)

## Exploratory Studies and Academic Progress (ESAP)

Chair	Secretary	Location	Department Phone
Musiette Clay	Jennifer Stroup	109 Bailey Library	724-738-2012

Department Web Site URL (<https://www.sru.edu/offices/exploratory-studies-and-academic-progress-office/>)

## ACADEMICS SUPPORT RESOURCES

### COLLEGE SKILLS WORKSHOP

During the fall, the Tutorial Center offers an array of workshops designed to help students succeed in college. All students are eligible to participate in the workshops on such topics as managing time, taking effective class notes, reading texts, building a strong memory, and increasing test-taking skills.

### TUTORIAL CENTER

Slippery Rock University's Tutorial Center provides undergraduate students with academic support through free peer individual and group tutoring services. Tutoring is offered for most Rock Studies Program courses. Tutorial services at Slippery Rock University are personalized and tailored to individuals' academic needs.

Tutoring services also include the proactive Supplemental Instruction (SI) model for academic assistance. Students hired as leaders attend assigned classes and work closely with enrolled students to assist with course content. Leaders facilitate group-tutoring sessions emphasizing cooperative learning activities.

Individual tutoring sessions for students are scheduled by appointment or on a drop-in basis, whereas group and SI sessions are scheduled to accommodate the greatest number of interested students.

## ADVISEMENT RESOURCES

### ACADEMIC ADVISEMENT

Academic Advisement is perhaps the most important faculty/student relationship outside the classroom. The University's academic advisement system is comprised of two primary organizational structures that include First Year Studies advisement and upper-class student/transfer student advisement.

### ADVISEMENT DEVELOPMENT

Exploratory Studies and Academic Progress is responsible for developing adviser and student advising resources, conducting adviser training and first year student advising informational workshops, and maintaining its involvement in retention-related and first-year research activities.

### FIRST YEAR STUDIES (FYRST) ADVISEMENT

The mission of the first-year student experience is to provide personalized support by ensuring that every student receives a high standard of academic advisement services from pre-enrollment to orientation, and throughout the student's first year.

During the student's enrollment in FYRST seminar, he/she should develop a more thorough understanding of his/her own purpose and goals in college as well as those of the university. If a new freshman has declared

a major, advisement will be provided by a faculty member selected from the major department. If no major has been declared, the student will be actively involved in the Exploratory Program and advised by a selected faculty member who has volunteered to work with students. First-year student academic progression will be assisted by the faculty adviser; however, it is the student's responsibility to see that he/she meets all requirements of the degree granting college so that upon completion of the first year of study, the student has attained the minimum number of credits, the specified courses and the minimum grade point average required by the major department.

### UPPER-CLASS STUDENT/TRANSFER STUDENT ADVISEMENT

If an upper-class student has declared a major, they will receive advisement from a faculty member in their major department. If an upper-class student has not declared a major, they will receive advisement from an Exploratory Studies and Academic Progress faculty member, who will help them in their academic progression toward fulfilling their degree requirements and will assist them in declaring an academic major.

Upon entrance into the university, new transfer students are assigned academic advisers from their major program.

## EXPLORATORY (UNDECLARED) PROGRAM

Incoming first-year and transfer students who are undeclared will participate in the Exploratory Studies Program. These students are advised by faculty members in the Exploratory Studies and Academic Progress Department as part of this program.

The Exploratory Studies Program includes engaging activities and support, such as:

- College Success Workshops
- Majors & Minors Exposition
- Designing Your Life and Major Exploration with Career Education and Development
- Developmental Advisement
- Assistance with Transition to New Major

## FRESHMAN SEMINAR (FYRST SEMINAR)

The FYRST Seminar is a one-credit hour course designed especially and exclusively to assist the first-year student with adjusting to college life at Slippery Rock University. This course provides, you, the student, with an opportunity to become integrated into the university's community of learners by exploring the purpose and value of higher education, addressing academic, personal and social transition issues, utilizing campus resources, refining academic skills and learning strategies, developing academic and career goals, and implementing strategies for maintaining personal wellness and overcoming barriers to success.

## LEARNING COMMUNITY CLUSTERS

The university implemented a learning community cluster program which includes a freshman seminar for the purpose of improving students' academic and social integration and establishing an educational environment that maximizes both student-student interaction, student-faculty and student-professional staff interaction. The transition to university life can be challenging and even stressful. The academic and social advantages provided by joining a learning community cluster and freshman seminar initiative can help reduce that stress. By enrolling in the same classes, students are encouraged to meet new people, make

friends easily, form study groups, participate in class discussions, and become engaged with their professors.

Research has shown that the more students connect to the university, the more successful they are in their college experience. Our research shows that by enhancing a student's sense of community and involvement, the freshman seminar and learning community clusters contribute to higher retention rates. Because both freshman seminars and learning communities promote active learning and foster collaboration and cooperation, students who participate are higher achievers and more involved in their classes.

## FACULTY

### Christa Brahler

Instructor  
Exploratory Stud & Acad Prog  
M.A., Slippery Rock University  
B.A., Indiana University

### April Carter

Instructor  
Exploratory Stud & Acad Prog

### Musiette Clay

Assistant Professor  
Exploratory Stud & Acad Prog  
M.A., Slippery Rock University  
B.S., Slippery Rock University

### Amber Hamilton

Instructor  
Exploratory Stud & Acad Prog  
M.Ed., University of North Carolina  
B.A., University of Virginia

### Susan Kushner

Associate Professor  
Exploratory Stud & Acad Prog  
M.S., Columbia University  
B.S., University of Pittsburgh

## COURSES

### ESAP 101 - FYRST Seminar

The FYRST Seminar provides students with an opportunity to become integrated into the university's community of learners by exploring the purpose and value of higher education, participating in the teaching/learning process, addressing academic and social transition issues, utilizing campus programs, services, and technology, and developing academic skills and learning strategies during the student's first semester at Slippery Rock University. This course is a one credit hour course designed to especially and exclusively assist first year students in their adjustment to college life at Slippery Rock University. No prerequisite. Enrollment by advisement. Open to first year students only. The credit earned in this course counts for graduation requirements.

Credits: 1

Term(s) Typically Offered: Offered Fall & Spring Terms

### ESAP 102 - Learning Strategies

Students will develop effective learning strategies, goals, and decision-making skills with a view toward implementing a plan to remove their probationary status and become a student in "good academic standing. This course is primarily for students on academic probation (other students may enroll with the permission of the instructor). Credits earned count for graduation as an elective.

Credits: 1

Term(s) Typically Offered: Offered as Needed

### ESAP 103 - Major and Career Exploration

This course will examine various decision making models as they are applied to choosing an academic major and/or career. Through a variety of in-class and out-of-class activities students will integrate self-knowledge and knowledge about majors and the world of work.

Credits: 1

Term(s) Typically Offered: Offered as Needed

### ESAP 109 - Developmental Mathematics

This course covers basic arithmetic skills necessary for successful completion of basic algebra. Topics include basic operations using whole numbers, fractions and decimals, ratios and proportions, percents, and solving equations. Students not exempted from ACSD 109 must successfully complete this course before enrolling in ACSD 110. Students must pass a standard proficiency exam to pass this course. Course grading: A, B, C, or NC. Credit earned in this course will not count toward the university's 120 credit hour minimum required for graduation.

Credits: 3

Term(s) Typically Offered: Offered as Needed

### ESAP 110 - Beginning Algebra

An overview of introductory algebra concepts, this course covers topics such as: simplifying variable expressions, solving equations and applications problems, simplifying polynomials, factoring, algebraic fractions, graphing linear equations, solving systems of linear equations, and simplifying radical expressions. Students who are placed into this course are expected to possess certain minimum competencies in arithmetic skills, and they must pass a standard proficiency exam to pass this course. Course grading: A, B, C, or NC. Prerequisite: ACSD 109 or exemption from ACSD 109. Credit earned in this course will not count toward the university's 120 credit hour minimum required for graduation.

Credits: 3

Term(s) Typically Offered: Offered Fall, Spring, & Summer

### ESAP 111 - Designing Your Life: Building a Life and Career with Meaning and Purpose

What if there were a class to help you explore the bigger issues of finding your way to a career and life you'll love. The Designing Your Life course offers a framework, tools, and a community of peers and mentors where we'll work on these issues through a design thinking approach. All students, regardless of your plans, interests, or goals, can benefit from this constructive, creative, and effective approach to finding and designing your life and vocation.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

**ESAP 121 - Freshman Research and Mentoring**

The FRAME Seminar introduces students to academic research skills. Students will collaborate with faculty mentors, peers and professionals to develop skills in methodologies, analyses and dissemination of scholarly work. The seminar course is intended for second semester freshman.

Prerequisites: INDS 101<sup>D</sup> or ESAP 101<sup>D</sup>

<sup>D</sup> Requires minimum grade of D.

Credits: 1

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

**ESAP 139 - Foundations of Academic Discovery**

Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.

Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

**ESAP 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ESAP 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**ESAP 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ESAP 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ESAP 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**ESAP 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**ESAP 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ESAP 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Freshman 1, Freshman 2 or Sophomore 1.

**ESAP 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ESAP 490 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ESAP 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

**ESAP 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

## Global Engagement

002 Spotts World Culture Building (Ground Floor)

724-738-2057

Office for Global Engagement (<http://www.sru.edu/offices/global-engagement-office-for/>)

### Vision

The vision of the Office for Global Engagement is a Slippery Rock University community of students, faculty, staff, and alumni who see beyond national borders and cultural differences, embrace the rich diversity of the world for educational and personal growth, and contribute to the greater good of our global society.

### International Student Services

In recognition of the unique needs of students who are not US citizens/permanent residents, the Office for Global Engagement coordinates the recruitment, admission, and support services for international students such as orientation to the United States and Slippery Rock University; immigration and legal matters (documentation for visas, passport renewal, extensions of stay, travel and reentry, work permits, etc.); support for the International Club; course registration; cultural/academic/personal adjustment; and community liaison.

### Student Abroad Opportunities

Study abroad is available to all Slippery Rock University students varying in length from one week to one year. These opportunities offer students the chance to explore different educational systems, cultures, and ways of life, as well as, to foster personal growth, cultural enrichment and enhanced employment opportunities.

For more information about study abroad at SRU, please visit <https://www.sru.edu/academics/study-abroad> (<https://www.sru.edu/academics/study-abroad/>)

## Courses

**ESL 001 - Start ESL Reading**

This course is not for native speakers of English. This is a beginning ESL reading course in which students focus on understanding the meaning of written English by reading a variety of texts. Students develop skills to read and understand English to make a transition from word-by-word translation to reading comprehension.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 002 - Basic ESL Reading**

This course is not for native speakers of English. This is a basic ESL reading course in which students read various types of written texts in order to improve reading skills. Topics relate to academic and everyday life. Emphasis is placed on building vocabulary, developing reading strategies and critical thinking skills.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 003 - Intermediate ESL Reading**

This course is not for native speakers of English. Students learn to read English as a second language fluently by reading interesting stories with a variety of topics, controlled for proficiency with appropriate difficulty. The course focuses on developing reading skills including pre-reading, skimming and scanning as well as building and developing a working English vocabulary. Students also write responses to the stories they read and share their reflections with their classmates.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 004 - High Intermediate ESL Reading**

This course is not for native speakers of English. This course uses a variety of authentic, meaningful and stimulating ESL readings. The course focuses on developing critical reading strategies, skimming and scanning abilities, increasing reading speed, building academic vocabulary power, drawing inferences, previewing, predicting and finding the main idea. Students will build successful reading strategies to comprehend language and concepts presented in college textbooks.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 005 - Advanced ESL Reading**

This course is not for native speakers of English. In this course, students read a variety of authentic, meaningful and stimulating texts in order to help students develop critical reading strategies, increase reading speed and build academic vocabulary. The goal of this class is to prepare students with successful ESL reading strategies to comprehend language and concepts that students will encounter in university level textbooks through a variety of disciplines as is required by a liberal studies curriculum.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 011 - Start ESL Listening**

This course is not for native speakers of English. This course helps students with basic ESL listening needs in daily life situations. Students develop their listening and speaking skills in order to interact with others. Emphasis is also placed on recognizing different sounds in American English.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 012 - Basic ESL Listening**

This course is not for native speakers of English. This course helps students with basic ESL listening needs in daily life and basic academic situations. Focus is on listening comprehension, with students developing their listening and speaking skills in order to interact with others.

Credits: 0

Term(s) Typically Offered: Offered as Needed



**ESL 013 - Intermediate ESL Listening I**

This course is not for native speakers of English. This course helps students with basic ESL listening needs in daily life and basic academic situations. Focus is on interpersonal communication skills in spoken American English. The course focuses on a variety of listening comprehension skills and strategies in order for students to become more effective listeners in a variety of settings.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 014 - High Intermediate ESL Listening**

This course is not for native speakers of English. This course prepares students for the demands of college-level academic listening tasks. The course aims to enhance students' ESL listening skills and to provide strategies and practice for listening to instructors and classmates who use a variety of speech patterns and vocabulary in class lectures and discussion.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 015 - Advanced ESL Listening**

This course is not for native speakers of English. This course prepares students for the demands of college-level academic listening tasks. The course aims to enhance students' ESL listening skills and to provide strategies and practice for listening to instructors and classmates who use a variety of speech patterns and vocabulary in class lectures and discussion. Students will practice listening to lectures from a variety of academic disciplines and will analyze the material that they hear. Students will also practice strategies for active participation in lectures and class discussion.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 021 - Start ESL Writing**

This course is not for native speakers of English. This course provides basic ESL writing instruction for beginning level English language learners. Students will work on sentence and short-paragraph length writing to express their ideas in English.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 022 - Basic ESL Writing**

This course is not for native speakers of English. This course helps ESL students learn how to generate topics and write paragraph length discourse. There is also an emphasis on reading to understand writing styles and organization strategies. Students develop writing fluency by keeping a journal of American English essays throughout the semester.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 023 - Intermediate ESL Writing**

This course is not for native speakers of English. This course helps students learn to generate topics and write paragraph length ESL discourse. Sentence structure and writing conventions of academic American English are also explored. Students will study application of vocabulary and grammar skills for writing and practice reading to understand writing better.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 024 - High Intermediate ESL Writing**

This course is not for native speakers of English. This course prepares students to write academic papers by exploring elements of academic writing and its process. Students generate topics, write cohesive paragraphs, use organizational strategies and learn to consider audience. Students also explore self-expression and writing identity through ESL journal writing.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 025 - Advanced ESL Writing**

This course is not for native speakers of English. In this course, students learn to write for a variety of purposes considering their audience. Lessons include developing appropriate writing styles and applying organizational strategies for different styles of texts. Students practice the writing process and practice prewriting, revision and editing. Students also learn about the U.S. academic expectations of writers, including appropriate citation practices and the importance of avoiding plagiarism. Students also learn strategies to improve their writing through self and peer review.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 031 - Start ESL Speaking**

This course is not for native speakers of English. This course emphasizes interpersonal ESL communication at a beginning level. Class meetings center around speaking activities that encourage fluency. Some attention will also be given to cultural considerations, pronunciation and conversation strategies.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 032 - Basic ESL Speaking**

This course is not for native speakers of English. This course emphasizes interpersonal ESL communication with some focus on academic speech. Class meetings center around speaking activities that encourage fluency and comprehensibility. The class will help students set realistic goals for their pronunciation practices and learning strategies to improve their comprehensibility and confidence in speaking English.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 033 - Intermediate ESL Speaking**

This course is not for native speakers of English. This course is designed to help students develop their own identity as an ESL speaker and user. In this course, students draw on their background knowledge of conversation skills from their primary language while they explore standard conventions in American English. The class will help students set realistic goals for their pronunciation studies and learn strategies to improve their comprehensibility and confidence in speaking English.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 034 - High Intermediate ESL Speaking**

This course is not for native speakers of English. This course helps students explore the dynamic of ESL communication between different cultures. It provides students with strategies to communicate with people from different cultures and provides opportunities for students to interact with speakers from different cultural backgrounds. The emphasis of the class is oral communication, but students also learn about nonverbal communication and develop reading and writing skills.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 035 - Advanced ESL Speaking**

This course is not for native speakers of English. This course is designed to enhance students' academic language skills to help them be successful in U.S. college courses. Students will learn to participate effectively in a variety of academic situations, such as discussions, lectures, study groups, team-projects and debates. The students will acquire a number of study skills including note-taking, brainstorming, problem-solving and pragmatic strategies for participating in class discussions.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 041 - Introduction to American English Grammar**

This course is not for native speakers of English. This course presents the basics of American English grammar with an emphasis on conversational strategies.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 042 - Basic American Grammar**

This course is not for native speakers of English. This course presents the basics of American English grammar with an emphasis on the sources from authentic written texts.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 043 - Intermediate American English Grammar**

This course is not for native speakers of English. This course is designed to reinforce and refine knowledge of common grammatical structures. Students will increase their familiarity with and use of standard grammatical structures. Emphasis will be placed on grammatical structures common to academic speech and writing.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 044 - High Intermediate American English Grammar**

This course is not for native speakers of English. This course is designed to reinforce and refine knowledge of common grammatical structures. Students will increase their familiarity with and use of standard grammatical structures. Emphasis will be placed on grammatical structures common to academic speech and writing.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 045 - Advanced American English Grammar**

This course is not for native speakers of English. This course is designed to develop the abilities needed to use a variety of grammatical structures effectively and efficiently. The emphasis is on academic English in oral and written communication.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 051 - Introduction to American Culture**

This course is not for native speakers of English. In this course, students learn about U.S. culture and explore resources available in the community of Slippery Rock, PA. students study pragmatic strategies to help them have successful interactions with others in the Slippery Rock community.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 052 - Exploring American Culture I**

This course is not for native speakers of English. In this course, students learn about American life on campus and in the town and region. Students will learn to use the resources available at SRU and in Slippery Rock and Pittsburgh area. The aim of the course is to help students adjust more quickly and completely to living and studying in America and at SRU.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 053 - Exploring American Culture II**

This course is not for native speakers of English. In this course, students learn about American life on campus and in the town of Slippery Rock and the Pittsburgh region. Students will compare cultural perspectives from around the world. In addition, students will explore academic culture at SRU and learn to use the resources available at SRU.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 054 - Understanding American Culture**

This course is not for native speakers of English. In this course, students learn about American life on campus and in the town and region. Students will compare cultural perspectives from around the world. In addition, students will explore academic culture at SRU and learn to use the resources available at SRU. By exploring culture through a variety of activities, both in and outside of the classroom, students develop a repertoire of listening, speaking, reading and writing strategies for effective interactions in the U.S.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 055 - Living in America**

This course is not for native speakers of English. This course exposes students to a combination of American history and culture. Students will explore a variety of cultural topics and historical events. A multimedia approach will be used to develop cultural awareness. The class will encourage students to engage in open communication concerning their understandings and assumptions about life in the U.S. Students will participate in group projects in which they present cultural and historical backgrounds about important U.S. events or practices. Students will also explore the implication of U.S. history and culture for university life.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 061 - ESL Tutorial I**

This course is not for native speakers of English. This course is a required tutorial. ESL tutoring provides individualized attention for students' language learning needs by pairing them with SRU students for small group instruction and interactions.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 062 - ESL Tutorial II**

This course is not for native speakers of English. This course is a required tutorial. ESL tutoring provides individualized attention for students' language learning needs by pairing them with SRU students for small group instruction.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 063 - ESL Tutorial III**

This course is not for native speakers of English. This course is a required tutorial. ESL tutoring provides individualized attention for students' language learning needs by pairing them with SRU students for small group instruction.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 064 - ESL Tutorial IV**

This course is not for native speakers of English. This course is a required tutorial. ESL tutoring provides individualized attention for students' language learning needs by pairing them with SRU students for small group instruction.

Credits: 0

Term(s) Typically Offered: Offered as Needed

**ESL 065 - Independent Seminar**

This course is not for native speakers of English. This course is a self-driven, student-oriented academic ESL practice session. In the beginning of a semester, each student meets with the director about their study plan in an American university and the director assigns a semester-long task. In the middle and at the end of a semester, the student must report the progress and the outcome of the study to the director.

Credits: 0

Term(s) Typically Offered: Offered as Needed

## Grants and Sponsored Research

Office: Old Main

Phone: 724-738-2045

Email: [grantsoffice@sru.edu](mailto:grantsoffice@sru.edu)

**Director**

Casey Hyatt

Research and scholarship are central features of any academic environment. At Slippery Rock University, faculty and students are active in a wide range of internally and externally funded projects that support the research, teaching and public service missions of the university. The Office of Grants, Research and Sponsored Programs (GRASP) is responsible for assisting faculty in the acquisition of external funding for scholarship, research, and other projects; representing the university in pre-award and award transactions with funding sponsors; acting as a liaison between project directors, sponsors, administration, and external groups; and assisting with post-award administration of grants

and contracts to assure compliance with federal, state, and university directives. The office also provides the administrative oversight to the Institutional Review Board (IRB) for ethical implementation of research projects involving human subjects and the Institutional Animal Care and Use Committee (IACUC) to ensure that the animal housing, care, and use in research labs meets federal standards and guidelines.

For more information: Grants and Sponsored Research (<https://www.sru.edu/offices/grants-research-and-sponsored-programs/>)

## Honors College

Chair	Secretary	Location	Department Phone
Jason Hilton	Rachelle Drake	Watson Hall	724-738-4003

Department Web Site URL (<https://www.sru.edu/academics/honors-college/>)

For information about the Honors College at SRU, please visit the Honors College Website (<https://www.sru.edu/academics/honors-college/>).

## Courses

**HONR 190 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HONR 195 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**HONR 198 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HONR 290 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HONR 295 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**HONR 298 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HONR 300 - Seminar in Global Learning**

Honors Global Learning Seminar is an interdisciplinary course that explores some of the world's most pressing, interesting, and enduring global issues. This course makes use of experiential learning to allow for personal and professional development of skills and knowledge to become informed, self-aware, and responsible global citizens with increased attentiveness to diversity and the interdependence of the world's people and/or environmental systems.

Credits: 3

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1, Senior 2 or Sophomore 2.

Enrollment limited to students with the HONORS PRGM - STUDENT attribute.

**HONR 385 - The Great Books**

Seminars on selected topics from the classic works of human thought.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**HONR 386 - The Great Books**

Seminars on selected topics from the classic works of human thought.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**HONR 387 - The Great Books**

Seminars on selected topics from the classic works of human thought.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**HONR 388 - The Great Books**

Seminars on selected topics from the classic works of human thought.

Credits: 3

Term(s) Typically Offered: Offered as Needed

**HONR 390 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HONR 395 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**HONR 398 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

**HONR 492 - Innovation for Positive Change**

This course deals with the background knowledge, skills, and dispositions needed to innovate. This includes the ability to develop new ideas, recognize opportunities, analyze risks, create teams of motivated helpers, foster positive communication within the team, lead the team effectively to bring about change, assess progress from an idea to a change, and to pivot along the way. This course serves as the capstone course for the Innovation and Entrepreneurship Rock Studies Thread.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Thematic Thread(s): Transfer Thread Completion Course

Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

**HONR 495 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

**HONR 498 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

## Housing and Residence Life

The philosophy of university residence halls at Slippery Rock University is educational and intended for student development that maintains that residence halls are not merely places to eat and sleep, but rather, communities in which students grow and develop. This development occurs in out-of-class learning experiences through participation in various activities assisting development at a personal, social and academic level. To achieve these objectives, the Residence Life staff offer opportunities to meet a wide variety of needs. Full-time professional staff members known as Assistant Directors/Associate Directors of Residence Life supervise the on-campus residence halls. These Assistant Directors/Associate Directors have a master's degree in college student personnel, counseling or related field. Additionally, each residence hall is staffed by a live-in Graduate Resident Director. These students, who are enrolled in graduate programs including Student Affairs in Higher Education, or other related program at SRU, reside in the residence hall and assist with the supervision of the Community Assistant staff. These Graduate Resident Directors are available to handle emergency situations because of their hall residency. Each residence hall floor section has a Community Assistant available to provide educational and social programs to assist in the operation of the facility, offer support for the residents, and be available for emergency purposes. These staff members are full time students who have been selected for their skills and ability to be academic and personal role models.

There are eight university-managed residence halls and one apartment complex, housing approximately 2,800 students. Six of the eight residence halls offer suite style housing with a variety of room styles. Each of the residential suite units provide in room bathroom facilities for the residents of that unit. The remaining two halls are traditional style with double rooms and communal restroom facilities. All SRU residence hall and apartments are air-conditioned.

Residence hall rooms and apartments are furnished with beds, chairs, desks, and window covers (shades). The beds are supplied with a mattress only. Students furnish their own blankets, pillows, towels, bedspreads, dresser covers, pillowcases, and sheets. Students may bring their own drapes and other accessories to personalize their living environment. Self-service laundries are available in each apartment building and residence hall. Lounges and recreation areas are available in each hall. A refrigerator and microwave are provided in each of the residential suite style units (Building A-F; Rock Apartments). Common kitchens equipped with microwaves and oven is available in each of the residence halls for students to cook snacks.

Residence Life is responsible for housing students who select to live in a university-owned residence hall. All freshmen, except those who live with their parents or legal guardians within a reasonable commuting distance, are required to live on campus. While the University provides housing for non-traditional students, freshmen over the age of 21 may request permission to live off campus. All such requests must be sent in writing to the Office of Residence Life. During the month of January, current students submit housing agreements for the following year. These materials are provided to all residence hall students.

Slippery Rock University has a diverse student population living in university residences. Therefore, in compliance with the Pennsylvania Fair Education Practice Act, all residence assignments are made without regard to race, color, sex, religion, ancestry, national origin, handicap or disability, record of a handicap or disability, or relationship or association with an individual with a handicap or disability, use of a guide or support animal, and/or handling or training of support or guide animals. Having accepted the Act, the university believes that a cross section of cultures provides a pluralistic community environment and exceptional opportunities for student development.

The Office of Residence Life provides six living learning communities for residence hall students. These communities offer an opportunity for students to apply to live with other students who share similar majors. Information regarding the living learning communities is provided along with housing agreement materials.

Students who reside in university-owned residence halls must contract to eat in the university dining facilities. No extensive cooking is permitted in the residence halls.

Campus residence halls will be closed to all students during university vacation periods and also between summer sessions and semesters. All students will be expected to leave the residence halls no later than 24 hours after their last examination. A designated residence hall will be open for summer sessions. Break housing is made available for an extra per night fee for those who sign up during certain break periods (such as Thanksgiving and Spring Break).

The Housing and Residence Life staff is always pleased to offer help and assistance! Please visit our website (<https://www.sru.edu/life-at-sru/housing/>) for a variety of resources or find us on Facebook at SRUResidenceLife. Our central office staff is available Monday-Friday 8:00AM-4:30PM to receive your call at 724.738.2082.

## ID Office

For information about the ID Office at SRU, please visit the ID Office Website (<https://www.sru.edu/offices/id-office/>).

## Inclusive Excellence

The Office for Inclusive Excellence (OIE) serves as an impetus for positive interactions with all cultures while also providing academic and social support through diverse learning opportunities.

OIE is established in an understanding of diversity that welcomes people of all abilities, ages, ethnicities, genders, nationalities, races, religions, spiritual traditions, socio-economic classes, and sexual orientations. OIE consists of the student transition programs (<https://www.sru.edu/life-at-sru/diversity/inclusive-excellence/jump-start/>), campus-wide diversity programming (<https://www.sru.edu/life-at-sru/diversity/inclusive-excellence/programs-and-workshops/>), Women's Center (<https://www.sru.edu/life-at-sru/diversity-equity-inclusion-and-belonging/inclusive-excellence/programs-and-workshops/>), Pride Center (<https://www.sru.edu/life-at-sru/diversity-equity-inclusion-and-belonging/lgbtqia/>) and the Veterans Center (<https://www.sru.edu/veterans/>).

Our goal is to practice inclusive excellence so that it is implemented and accomplished consistently throughout the institution.

### The Office for Inclusive Excellence:

- Provides mentoring and coaching designed to offer academic and social support, build individual capacity and self-efficacy, and connect students to the University community
- Creates opportunities for all students to explore and celebrate cultures and identities in a safe and supportive atmosphere
- Gives voice to the needs of students while teaching them to be positive advocates for change

### The Office for Inclusive Excellence has four primary concentrations:

1. Student Transitions
2. Mentoring
3. Inclusion
4. Advocacy

For more information on any areas of the Office for Inclusive Excellence, please visit us on the web at Office for Inclusive Excellence (<https://www.sru.edu/life-at-sru/diversity/inclusive-excellence/>).

## Leadership Development Program

Leadership Development Center

**Office:** 105 Old Main, Slippery Rock, PA 16057

**Phone:** 724-738-4334

### Director

Erin Strain

SRU's Leadership Development Center (LDC) provides exceptional programs that engage students, faculty, staff, and community members through experiential learning opportunities. The staff at the LDC is comprised of both professional and student workers who bring a variety of expertise, knowledge, and diversity to our team. Programming at the LDC includes experience-based academic labs, student engagement, leadership & professional development workshops, and staff retreats, just to name a few! Each of these experiences is unique and customized for the groups we serve.

Our programming is complemented by our facilities: a 2,200 sq. ft. training center and a military designed leadership reaction course. As a



resource to the entire campus and the greater Slippery Rock community, the LDC is here for your group. Lodging is also available in the summer.

## Musical Organizations

For information about the ensembles at SRU, please visit <https://www.sru.edu/academics/colleges-and-departments/cla/departments/music/music-ensembles> (<https://www.sru.edu/academics/colleges-and-departments/cla/departments/music/music-ensembles/>).

## Off-Campus Housing

Off-campus housing is available in privately owned apartment complexes, rooming houses and homes. The University does not inspect or approve off-campus housing. Housing within the borough of Slippery Rock must comply with the housing code for property maintenance of the borough, which sets legal standards for safety (sanitation, freedom of hazards, etc.) and livability (water, ventilation, heat, etc.). Housing in the township does not fall under the jurisdiction of the Slippery Rock Borough zoning laws, but it must meet minimal health standards as determined by Butler County.

In addition to this housing, a number of rooms and apartments are available in the community. Off-campus housing lists are available via [www.places4students.com](http://www.places4students.com) (<http://www.places4students.com>). Students who live off campus may contract to eat in the university dining facilities.

## Parking Office

For information about the Parking Office at SRU, please visit the Parking Office Website (<https://www.sru.edu/offices/parking/>).

## Preschool Child Care Center

The SRU/SGA Preschool and Child Care Center is a state licensed, nationally accredited non-profit program managed by the Student Government Association, Inc. of Slippery Rock University. Services are available for children age three to five of students, faculty, staff, and members of the Slippery Rock community. Children through age 12 are welcome for before and after-school care and for summer programs.

The Center is licensed by the Pennsylvania Department of Human Services and Department of Education and is accredited by the National Association for the Education of Young Children. It is a Keystone Stars STAR 4 rated site. The Center is the recipient of the PA Pre-K Counts and Federal CCAMPIS grants which provide free or reduced preschool to children based on financial need. The CCAMPIS grant is only available to the children of University enrolled students. In 2016, the Center was approved as a child care provider for both the Child Care Aware and GSA Subsidy military fee assistance programs. The Center employs one Master's level Director, three Master's level Head Teachers, three Graduate Assistants, and several undergraduate students majoring in education.

The Center is located at 007 McKay Education Building, and is open from 7:00 a.m. to 6:00 p.m., Monday through Friday. Service is provided year round. To contact, please call 724-738-2102.

## President's Commissions

Slippery Rock University has the following Presidential Commissions:

- Commission for Disability Issues
- Commission for Racial and Ethnic Diversity
- Commission on Women
- Commission for Gender Identity & Expression and Sexual Orientation
- Commission on Wellness
- Commission on Sustainability
- Commission for Veterans and Military Affairs
- Commission for Mental Health

To view information about the President's Commissions at SRU, please visit the President's Commission website (<https://www.sru.edu/about/administration/office-of-the-president/presidents-commissions/>).

## Pride Center

For information about the Pride Center at SRU, please visit the Pride Center Website (<http://www.sru.edu/life-at-sru/diversity/lgbtq/>).

## Publications

### SLAB

SLAB is an award winning, nationally recognized literary magazine published by students from the English Department. SLAB publishes fiction, poetry, creative nonfiction, and graphic novel excerpts from established and emerging writers including winners of NEA Fellowships, Pushcart Prizes, and Eisner Awards. Staff members gain valuable publications experience in manuscript selection, editing, creative writing, and layout. Founded in 2005, SLAB receives funding through the Student Government Association. To view SLAB, please visit [slablitmag.org](http://www.slablitmag.org) (<http://www.slablitmag.org/>).

### The Rocket

The Rocket is the independent, student-run newspaper serving Slippery Rock University. The staff publishes digital content daily on [www.theonlinerocket.com](http://www.theonlinerocket.com) (<http://www.theonlinerocket.com/>) and print editions on a monthly basis. The Rocket produces award-winning news, sports, and feature content covering the campus community and beyond, and serves as an outlet for student opinion through the editorial and letter-to-the-editor features. The Rocket provides an excellent experience for students whose career goals are in the areas of print, broadcast or converged journalism, social media, advertising, layout and design, and general digital content or news management.

## Radio and Television

### WSRU Radio

WSRU-FM 88.1 is a student owned and operated FCC regulated radio station and podcast studio on campus. It gives students hands-on experience in all aspects of radio and audio production including on-air, sports play-by-play, promotions, and event planning all under the guidance of a faculty advisor. WSRU-FM operates out of 009 Strain Safety Building and is open to students from any major.

### WSRU-TV

The Maltby Converged Media Center is home to the student-run digital news team, WSRU-TV, and serves as an experiential learning environment for broadcast production courses offered from the Communication Department. The center features a multicamera studio space, control room, Mac-based editing bays, podcast stations and professionally

maintained, state-of-the-art equipment that is updated regularly to meet industry standards. Students at the center gain hands-on experience in every phase of the production process and build their portfolios as they prepare for internships and careers in the media industry.

## Special Recognition of Academic Achievement

### Special Recognition of Academic Achievement

Slippery Rock University faculty and administration place a high value on the academic accomplishments of its students. SRU's academic reputation and its stature in the community of universities are tied inextricably to the scholastic achievements of its students. The University's rich and extensive resources provide a foundation of support for the realization of this goal. Scholarly and dedicated University faculty strive to challenge students' intellectual development and their achievement of excellence. The University community believes that student efforts in the attainment of high levels of scholarship deserve appropriate recognition and officially acknowledges student achievement throughout the academic year.

Each spring, the SRU celebrates academic achievements at a variety of events including the Celebration of Achievement. Among those honored at the "Celebration of Achievement" are the top twenty students in the sophomore, junior, and senior classes. These students have attained the highest cumulative averages for coursework completed at Slippery Rock University in their respective class. These individuals are recognized as Presidential Scholars.

Also acknowledged at this event are the "Outstanding Student in Research, Scholarship or Creative Activity" and the "Outstanding Student Academic Leader" from each of the colleges. SRU faculty members are honored with Presidential Awards for "Excellence in Teaching", "Advising Excellence" and "Scholarly and Creative Achievement". SRU's winner of the "Dr. Ali-Zaidi Award for Academic Excellence" is announced.

A separate event recognizes every student who has earned Dean's list status.

The annual Symposium for Student Research, Scholarship, and Creative Activity, a day-long event in which students present their research and scholarship, creative performances, and art works to the campus community is held during the spring semester.

## Student Center and Conference Services

The mission of the Slippery Rock University Student Center and Conference Services department is to provide assistance to anyone seeking to hold an event on campus. Through our efforts, we create a welcoming community that fosters student learning and provides a valuable, regional resource.

- The Robert M. Smith Student Center is a community gathering space where we create opportunities for learning and engagement through informal interaction and programmed events. In addition to various lounges and meeting spaces, the following offices and services are located in the Robert M. Smith Student Center: Student Center Operations, Dining Services, Conference Services, FNB Bank,

Electronic Technology Center, Starbucks, SGA Bookstore, Rocky's Food Court, Quaker Steak & Lube, and the Student Development Suite including Student Engagement & Leadership, Inclusive Excellence, Women's Center, Student Success, Cooperative Activities, Student Government Association, University Program Board, Pride Center, Veteran's Lounge and other student organization offices.

- Students are our primary stakeholders, yet we also aim to serve the needs of the university and the community through support for events and programs.
- We train and empower our student employees to think critically, solve problems, and engage positively with diverse constituents.
- We create experiences for youth and adults to utilize our facilities and services through summer camps and conferences leading to positive benefits for the campus.
- We create learning environments that are inclusive, accessible, adaptable, and equipped with appropriate technology for a variety of events.

The variety of event spaces makes Slippery Rock University the venue of choice for student, staff, faculty, and community members to hold meetings, workshops, banquets, weddings, conferences, summer camps, and other special events. For additional information, stop by the Student Center Information Desk or call 724-738-4926.

## Student Conduct

Slippery Rock University is an academic community in which there is mutual respect and trust of the persons who learn, teach, and work within it. Students of Slippery Rock University are entitled to certain rights and privileges which must be protected through fair and orderly processes and which are best safeguarded when each student acts responsibly. All students of the university community are equally entitled to the protection of the code of conduct. Students are expected to be familiar with the provisions of the Student Code of Conduct which is available at [www.sru.edu/studentconduct](http://www.sru.edu/studentconduct) (<http://www.sru.edu/studentconduct/>).

## Student Counseling Center

### Clinical Director

Dr. Ken Messina LPC

### Phone

724.738.2034

### Email

[scc@sru.edu](mailto:scc@sru.edu)

The Student Counseling Center (SCC) strives to facilitate the total development of students by reducing distress, enhancing mental health, well-being, quality of life, and supporting aspirations. Our primary focus is on providing brief, confidential counseling aimed at helping students to succeed academically and interpersonally. When students require mental health services that are beyond the role or scope of the SCC, we will make appropriate referrals to campus and community resources. See our website for services and contact information.

<https://www.sru.edu/life-at-sru/health-and-wellness/counseling-center>  
(<https://www.sru.edu/life-at-sru/health-and-wellness/counseling-center/>)

## Student Engagement and Leadership

The Office for Student Engagement and Leadership serves as the premier outlet for students to learn about and explore opportunities to connect

with peers and engage in co-curricular and leadership experiences at SRU.

## Mission

The mission of the Office for Student Engagement & Leadership is to empower students in pursuit of their own developmental growth and achievements, through purposefully cultivated co-curricular opportunities and leadership experiences.

The Office for Student Engagement and Leadership oversees the following involvement areas:

- Student Organizations (<https://www.sru.edu/life-at-sru/student-activities/clubs-and-organizations/>)
- Fraternity and Sorority Life (<https://www.sru.edu/life-at-sru/student-activities/clubs-and-organizations/fraternity-and-sorority-life/>)
- Leadership Programs (<https://www.sru.edu/life-at-sru/student-activities/leadership-programs/>)
- Emerging Leadership Experience (<https://www.sru.edu/life-at-sru/student-activities/leadership-programs/emerging-leadership-experience/>)
- Student Government Association (<https://www.srsga.org/>)
- University Program Board (<https://www.srupb.com/>)
- Homecoming (<https://sru.campuslabs.com/engage/organization/homecoming/>)
- Rock the Weekend (<https://sru.campuslabs.com/engage/organization/rtw/>)
- Week of Welcome (<https://www.sru.edu/life-at-sru/student-activities/wow/>)

## CORE

CORE is the University's online student engagement platform, and the ultimate way to Connect, Organize, Reflect, and Engage in leadership and involvement opportunities at SRU. Students can explore hundreds of ways to get involved at SRU. Students can learn about student organizations, find volunteer experiences, and discover leadership opportunities. They can also stay up-to-date with the latest happenings on campus through the Events Calendar and personal news feed. CORE also provides features for students to organize and manage their own involvement through a co-curricular transcript.

To learn more about the various involvement areas and what's happening on campus, log into CORE at [www.sru.edu/core](http://www.sru.edu/core) (<http://www.sru.edu/core/>), using your SRU username and password. For more information regarding the Office for Student Engagement and Leadership contact 724-738-2092 or [leadership@sru.edu](mailto:leadership@sru.edu).

## Student Health Services

For information about Student Health Services at SRU, please visit the Student Health Services Website (<https://www.sru.edu/offices/student-health-services/>).

## Student Support

For information about Student Support at SRU, please visit the Student Support Website (<http://www.sru.edu/life-at-sru/health-and-wellness/care-network/>).

## Success Coaching

724-738-2011

### Success Coaches

Julie Ferringier

Emily McClaine

Bryan Murray

Aubrey Rader

Success Coaching empowers students in their college transitions, goal setting, time management, academic habits, effective learning strategies, academic motivation, exam preparation, campus connections, and academic progress. Coaches work with students in one-on-one sessions and group workshops. Each session is individualized based on the student's needs and goals. While some students meet with a coach once, or periodically, other students may choose to meet with a coach semi-regularly in order to develop the skills they need to reach their goals. Coaching helps students to cultivate deep learning practices and use resources that will help them thrive. All students at SRU are welcome to meet with a success coach, and can do so by emailing [success.coach@sru.edu](mailto:success.coach@sru.edu). The Success Coaching Program also oversees Peer Academic Coaching, which offers weekly one-on-one coaching on fundamental academic skills with an undergraduate Peer Academic Coach. The Success Coaching Website (<https://www.sru.edu/academics/academic-services/student-success-coaches/>) provides more details about services and staff.

## Theatre Productions

The Department of Theatre sponsors an active co-curricular program, and encourages students from across the university community to participate in productions – both onstage and backstage. Each year, SRU Theatre presents a season of faculty-directed productions: a balance of Broadway hits, new plays, and classics of the world theatre. An additional lab theatre space allows students to direct and produce their own work as well.

Participation in mainstage productions is open to any interested student and is not confined to theatre majors. Auditions for productions are held throughout the academic year and are regularly announced on CORE. Students are encouraged to check CORE regularly or contact the Theatre Department for additional information.

## University Advancement - Alumni Engagement

**Office:** Russell Wright Alumni House

**Phone:** 724-738-2018

**Email:** [alumni@sru.edu](mailto:alumni@sru.edu)

**Director**

Kelly Bailey

**Clerical Assistant**

Lisa Luntz

Slippery Rock University has more than 70,000 graduates living throughout the country. Alumni are encouraged to join the Slippery Rock

University Alumni Association, a separately incorporated organization that is devoted to serving the university and its alumni.

The Slippery Rock University Alumni Association hosts several events in the region and across the country to engage alumni. A variety of benefits are associated with membership to the association, including discounts on insurance, partnerships with national travel partners and savings at campus entities including the SGA bookstore. Significantly, the Alumni Association manages and awards eighteen scholarships. Seventeen of the scholarships, the Alumni Association Scholarship, Past Presidents' Scholarship, the Madeline F. Stoops Scholarship, the the Nancy Angell/Hallie Dugan Smith Scholarship, the Eisaman Alumni Scholarship for sophomore students, the Maree McKay/ Esther Smiley Scholarships, the Carl and Norma Laughner Scholarship, the Maggie Meise Fellowship, the Watson Family Scholarship, Jeanne Powell Furrie Scholarships, the Anna Brua Williams Scholarships for women elementary education majors, and the Addison Scholarships are for academic excellence. The N. Kerr Thompson Scholarship is for student athletes.

The Association also sponsors Homecoming and Alumni Weekend, as well as special events throughout the year. Additional information on the Alumni Association as well as upcoming events can be found on the alumni web site at [www.rockalumni.com](http://www.rockalumni.com) (<http://www.rockalumni.com/>) or at [www.sru.edu](http://www.sru.edu) (<http://www.sru.edu/>) and then clicking on Alumni.

## University Police

For information about the University Police at SRU, please visit the University Police Website (<https://www.sru.edu/life-at-sru/safety/university-police/>).

## Veteran's Services

For information about Veteran's Services at SRU, please visit the Veteran's Services Website (<http://www.sru.edu/veterans/>).

## Women's Center

For information about the Women's Center at SRU, please visit the Women's Center Website (<https://www.sru.edu/life-at-sru/diversity-equity-inclusion-and-belonging/inclusive-excellence/programs-and-workshops/>).

## Archived Undergraduate Catalogs

### Archived Undergraduate Catalogs (PDF)

2004-2006 Undergraduate Catalog (<https://catalog.sru.edu/undergraduate/archived-undergraduate-catalogs/20042006UndergraduateCatalog.pdf>)

2006-2008 Undergraduate Catalog (<https://catalog.sru.edu/undergraduate/archived-undergraduate-catalogs/20062008UndergraduateCatalog.pdf>)

2008-2010 Undergraduate Catalog (<https://catalog.sru.edu/undergraduate/archived-undergraduate-catalogs/20082010UndergraduateCatalog.pdf>)

2010-2012 Undergraduate Catalog (<https://catalog.sru.edu/undergraduate/archived-undergraduate-catalogs/20102012UndergraduateCatalog.pdf>)

2012-2014 Undergraduate Catalog (<https://catalog.sru.edu/undergraduate/archived-undergraduate-catalogs/20122014UndergraduateCatalog.pdf>)

2014-2016 Undergraduate Catalog (<https://catalog.sru.edu/undergraduate/archived-undergraduate-catalogs/20142016UndergraduateCatalog.pdf>)

2016-2018 Undergraduate Catalog (<https://catalog.sru.edu/undergraduate/archived-undergraduate-catalogs/20162018UndergraduateCatalog.pdf>)

2018-2020 Undergraduate Catalog (<https://catalog.sru.edu/undergraduate/archived-undergraduate-catalogs/20182020UndergraduateCatalog.pdf>)

2020-2021 Undergraduate Catalog ([https://catalog.sru.edu/undergraduate/archived-undergraduate-catalogs/Undergraduate\\_Catalog\\_2020-2021\\_8-20-21.pdf](https://catalog.sru.edu/undergraduate/archived-undergraduate-catalogs/Undergraduate_Catalog_2020-2021_8-20-21.pdf))

2021-2022 Undergraduate Catalog ([https://catalog.sru.edu/undergraduate/archived-undergraduate-catalogs/Slippery\\_Rock\\_University\\_Undergraduate\\_Catalog\\_2021-2022\\_10-05-22.pdf](https://catalog.sru.edu/undergraduate/archived-undergraduate-catalogs/Slippery_Rock_University_Undergraduate_Catalog_2021-2022_10-05-22.pdf))

## Archived Full Catalog

2021-2022 Full Catalog (<https://catalog.sru.edu/archive/2021-2022/>)

# ACADEMIC POLICIES

Academic procedures and policies are subject to change at any time. Changes may involve course content, credit hours, program requirements, and program admission requirements among others. It is the students' responsibility to review their My Rock Audit Report and confer with their academic advisers, the appropriate academic department, and the Office of Academic Records and Registration regarding current academic procedures and policies.

## A

- Absence (<https://catalog.sru.edu/academic-policies/absence-policy/>)
- Academic Advisers - Undergraduate (<https://catalog.sru.edu/academic-policies/academic-advisers-undergraduate/>)
- Academic Certificates (<https://catalog.sru.edu/academic-policies/academic-certificates/>)
- Academic Complaints (<https://catalog.sru.edu/academic-policies/academic-complaints/>)
- Academic Integrity (<https://catalog.sru.edu/academic-policies/academic-integrity/>)
- Academic Majors - Undergraduate (<https://catalog.sru.edu/academic-policies/academic-majors/>)
- Academic Minors - Undergraduate (<https://catalog.sru.edu/academic-policies/academic-minors/>)
- Academic Restart - Undergraduate (<https://catalog.sru.edu/academic-policies/academic-restart/>)
- Academic Standing (<https://catalog.sru.edu/academic-policies/academic-standing/>)
- Accelerated Three-Plus (3+) Program ([https://catalog.sru.edu/academic-policies/three-plus\\_program/](https://catalog.sru.edu/academic-policies/three-plus_program/))
- Admission To Degree Candidacy - Graduate (<https://catalog.sru.edu/academic-policies/admission-to-degree-candidacy/>)
- Application for Certification - Graduate (<https://catalog.sru.edu/academic-policies/application-for-certification/>)
- Applying For Graduation (<https://catalog.sru.edu/academic-policies/application-for-graduation/>)
- Attendance (<https://catalog.sru.edu/academic-policies/attendance-policy/>)
- Auditing Courses (<https://catalog.sru.edu/academic-policies/auditing-courses/>)

## C

- Change of Major - Undergraduate (<https://catalog.sru.edu/academic-policies/change-of-major/>)
- Chosen Name (<https://catalog.sru.edu/academic-policies/chosen-name/>)
- Classification of Students - Undergraduate (<https://catalog.sru.edu/academic-policies/classification-of-students/>)
- Comprehensive Examinations - Graduate (<https://catalog.sru.edu/academic-policies/comprehensive-examinations/>)
- Computer Competency Requirement - Undergraduate (<https://catalog.sru.edu/academic-policies/computer-competency-requirement/>)
- Course Drop, Add, Withdrawal (<https://catalog.sru.edu/academic-policies/course-drop-add-withdrawal/>)

- Course Information - Graduate (<https://catalog.sru.edu/academic-policies/course-information/>)
- Course Levels - Undergraduate (<https://catalog.sru.edu/academic-policies/course-levels/>)
- Credit By Examination - Undergraduate (<https://catalog.sru.edu/academic-policies/credit-by-examination/>)
- Credit For Military Service (<https://catalog.sru.edu/academic-policies/credit-for-military-service/>)
- Credit Hour Policy (<https://catalog.sru.edu/academic-policies/credit-hour-policy/>)

## D

- Dean's List - Undergraduate (<https://catalog.sru.edu/academic-policies/deans-list/>)
- Degree/Certificate Requirements (<https://catalog.sru.edu/academic-policies/degree-certificate-requirements/>)
- Dissertation - Graduate (<https://catalog.sru.edu/academic-policies/dissertation/>)

## E

- Earning 2 Degrees or 2 Majors - Undergraduate (<https://catalog.sru.edu/academic-policies/earning-2-degrees-or-2-majors/>)

## F

- Final Examinations (<https://catalog.sru.edu/academic-policies/final-examinations/>)
- Freshman Cohort and Student Athlete Graduation Rate - Undergraduate (<https://catalog.sru.edu/academic-policies/freshman-cohort-student-athlete-graduation-rate/>)

## G

- Grade Appeal (<https://catalog.sru.edu/academic-policies/grade-appeal-policy/>)
- Grade Change (<https://catalog.sru.edu/academic-policies/grade-change/>)
- Grade Release (<https://catalog.sru.edu/academic-policies/grade-release-policy/>)
- Grading Procedures and Policies (<https://catalog.sru.edu/academic-policies/grading-procedures-and-policies/>)
- Grading System (<https://catalog.sru.edu/academic-policies/grading-system/>)
- Graduation Requirements (<https://catalog.sru.edu/academic-policies/graduation-requirements/>)

## H

- Honors at Graduation (<https://catalog.sru.edu/academic-policies/honors-at-graduation/>)

## I

- Incomplete Grades (<https://catalog.sru.edu/academic-policies/incomplete-grades/>)
- Instructional Method (<https://catalog.sru.edu/academic-policies/instructional-method/>)
- Internships - Undergraduate (<https://catalog.sru.edu/academic-policies/internships/>)



**L**

- Legal Name Change (<https://catalog.sru.edu/academic-policies/legal-name-change/>)

**M**

- Math Placement - Undergraduate (<https://catalog.sru.edu/academic-policies/math-placement/>)
- Military Absence (<https://catalog.sru.edu/academic-policies/military-absence-policy/>)
- Military Withdrawal (<https://catalog.sru.edu/academic-policies/military-withdrawal/>)
- Minimum Credit Hour and Quality Point Requirements - Undergraduate (<https://catalog.sru.edu/academic-policies/minimum-credit-hour-quality-point-requirements/>)
- Modern Language Language for BA Degree - Undergraduate (<https://catalog.sru.edu/academic-policies/modern-language-requirement-ba-degree/>)

**N**

- Non-Degree Student (<https://catalog.sru.edu/academic-policies/non-degree-student/>)
- Notice Designating Directory Information (<https://catalog.sru.edu/academic-policies/notice-designating-directory-information/>)
- Notice of Consumer Information Web Site and Annual Security Report (<https://catalog.sru.edu/academic-policies/notice-consumer-information-web-site-annual-security-report/>)

**P**

- Pass-No Credit Grades - Undergraduate (<https://catalog.sru.edu/academic-policies/pass-no-credit-grades/>)
- Posthumous Conferral of Degree (<https://catalog.sru.edu/academic-policies/posthumous-conferral-degree/>)
- Prerequisites and Co-Requisites (<https://catalog.sru.edu/academic-policies/prerequisites-co-requisites/>)

**R**

- Readmission (<https://catalog.sru.edu/academic-policies/readmission/>)
- Records Privacy Policy (<https://catalog.sru.edu/academic-policies/records-privacy-policy/>)
- Registration Procedures (<https://catalog.sru.edu/academic-policies/registration-procedures/>)
- Repeat of Courses (<https://catalog.sru.edu/academic-policies/repeat-of-courses/>)
- Research Requirements - Graduate (<https://catalog.sru.edu/academic-policies/research-requirements/>)
- Residency (<https://catalog.sru.edu/academic-policies/residency/>)

**S**

- Second Degree (<https://catalog.sru.edu/academic-policies/second-degree/>)
- Semester Credit Load - Undergraduate (<https://catalog.sru.edu/academic-policies/semester-credit-load/>)
- Senior Citizens (<https://catalog.sru.edu/academic-policies/senior-citizens/>)

- Senior Undergraduate Students Earning Graduate Credit - Undergraduate (<https://catalog.sru.edu/academic-policies/senior-undergraduate-students-earning-graduate-credit/>)
- Statute of Limitations - Graduate (<https://catalog.sru.edu/academic-policies/statute-of-limitations/>)
- Student Identity Verification in Distance Learning (<https://catalog.sru.edu/academic-policies/student-identity-verification-distance-learning-policy/>)
- Student Responsibility (<https://catalog.sru.edu/academic-policies/student-responsibility/>)
- Summer and Winter Sessions (<https://catalog.sru.edu/academic-policies/summer-and-winter-sessions/>)

**T**

- The Rock/Basic Course Requirements - Undergraduate (<https://catalog.sru.edu/academic-policies/the-rock-basic-course-requirements/>)
- Theses - Graduate (<https://catalog.sru.edu/academic-policies/thesis/>)
- Total Semester Hours of Credit and GPA - Graduate (<https://catalog.sru.edu/academic-policies/total-semester-hours-of-credit-and-gpa/>)
- Transcripts (<https://catalog.sru.edu/academic-policies/transcripts/>)
- Transfer Credit (<https://catalog.sru.edu/academic-policies/transfer-credit/>)
- Transient Student Status - Undergraduate (<https://catalog.sru.edu/academic-policies/transient-student-status/>)

**U**

- Upper Division Course Work - Undergraduate (<https://catalog.sru.edu/academic-policies/upper-division-course-work/>)

**V**

- Veteran Students Course Scheduling (<https://catalog.sru.edu/academic-policies/veteran-student-course-scheduling/>)
- Visiting Students (PASSHE) (<https://catalog.sru.edu/academic-policies/visiting-students/>)

**W**

- Withdrawal From The University - Undergraduate (<https://catalog.sru.edu/academic-policies/withdrawal-from-the-university/>)
- Writing Outcomes For Slippery Rock University Graduates - Undergraduate (<https://catalog.sru.edu/academic-policies/writing-outcomes/>)

**X**

- X Grades (<https://catalog.sru.edu/academic-policies/x-grades/>)

# 2021-2022 ACADEMIC CALENDAR

## Fall Semester 2021

Date	Event
Monday, August 16	Senior Citizens Register for Fall Classes
Sat, August 21 – Sun, August 22	Welcome Back Days
Monday, August 23	Fall Semester Classes Begin at 8:00 a.m.
Monday, August 30	Drop/Add Deadline in University Offices or on MySRU – Full Semester, 1st Half, 1st 5 Week, 12 Week and 10 Week Classes
Tuesday, August 31	Course Withdrawal Period Begins (“W”) – Full Semester, 1st Half, 1st 5 Week, 12 Week and 10 Week Classes
Friday, September 3	Last Day to Add with Professor’s Approval on Add Forms & Last Day for Grade Option
Monday, September 6	Labor Day (No Day or Evening Classes)
Tuesday, September 7	Classes Resume at 8:00 a.m.
Wednesday, September 15	“W” Deadline for 1st 5 Week Classes
Monday, September 27	End 1st 5 Week Classes; “W” Deadline for 1st Half Semester Classes
Tuesday, September 28	Start 2nd 5 Week Classes
Tuesday, October 5	Drop/Add Deadline 2nd 5 Week Classes
Friday, October 8	“W” Deadline for 10 Week Classes
Sun, October 10 – Tue, October 12	Fall Break – No Day or Evening Classes
Tuesday, October 12	Professional Development Day
Wednesday, October 13	Classes Resume at 8:00 a.m.; Fall Midterm Grades Due by Noon
Friday, October 15	End 1st Half Semester Classes
Monday, October 18	Start 2nd Half Semester Classes
Wednesday, October 20	“W” Deadline for 12 Week Classes
Friday, October 22	“W” Deadline for 2nd 5 Week Classes
Monday, October 25	Drop/Add Deadline 2nd Half Semester Classes
Wednesday, November 3	“W” Deadline for Full Semester Classes; End 2nd 5 Week Classes & End 10 Week Classes
Thursday, November 4	Start 3rd 5 Week Classes

Mon, November 8-Fri, November 19	Winter 2021 and Spring 2022 Registration
Thursday, November 11	Drop/Add Deadline 3rd 5 Week Classes
Wednesday, November 17	End 12 Week Classes
Friday, November 19	“W” Deadline for 2nd Half Semester Classes
Monday, November 22	Non-Degree Student Registration for Winter/Spring
Wed, November 24 – Sun, November 28	Thanksgiving Recess (No Day or Evening Classes)
Monday, November 29	Classes Resume at 8:00 a.m.
Wednesday, December 1	“W” Deadline for 3rd 5 Week Classes
Monday, December 6	Last Day of Classes (3rd 5 week & 2nd Half Classes Meet through Exam Week)
Monday, December 6	Last Day to Withdraw from University (All Classes)
Tue, December 7 – Sat, December 11	Final Exam Week
Friday, December 10	End 3rd 5 Week Classes; End 2nd Half Classes
Saturday, December 11	Commencement 11:00 a.m.
Tuesday, December 14	Final Grades Due by 3:00 p.m.

## Winter Session 2021

Date	Event
Wednesday, December 8	Senior Citizens Register for Winter Classes
Wednesday, December 15	Winter Session Classes Begin
Thursday, December 16	Drop/Add Deadline for Winter Session
Thursday, December 30	Winter Session Withdrawal (“W”) Deadline
Thursday, January 6	Winter Session Ends
Monday, January 10	Winter Session Grades Due by Noon

## Spring Semester 2022

Date	Event
Tuesday, January 11	Senior Citizens Register for Spring Classes
Tuesday, January 18	Spring Semester Classes Begin at 8:00 a.m.
Wednesday, January 26	Drop/Add Deadline in a University office or on MySRU – Full Semester, 1st Half, 1st 5 Week, 12 Week and 10 Week Classes

Thursday, January 27	Course Withdrawal "W" Period Begins— Full Semester, 1st Half, 1st 5 Week, 12 Week and 10 Week Classes
Monday, January 31	Last Day to Add with Professor's Approval on Add Forms & Last Day for Grade Option
Wednesday, February 9	"W" Deadline for 1st 5 Week Classes
Monday, February 21	End 1st 5 Week Classes & "W" Deadline 1st Half Semester Classes
Tuesday, February 22	Start 2nd 5 Week Classes
Tuesday, March 1	Drop/Add Deadline 2nd 5 Week Classes
Thursday, March 3	Midterm Grades Due by Noon
Friday, March 4	"W" Deadline for 10 Week Classes
Wednesday, March 9	End of 1st Half Semester Classes
Thursday, March 10	Start of 2nd Half Semester Classes
Sun, March 13 – Sun, March 20	Spring Break
Monday, March 21	Classes Resume at 8:00 a.m.; "W" Deadline 12 Week Classes
Wednesday, March 23	"W" Deadline for 2nd 5 Week Classes
Thursday, March 24	Drop/Add Deadline 2nd Half Semester Classes
Mon, April 4 – Fri, April 15	Summer/Fall 2022 Registration
Monday, April 4	"W" Deadline for Full Semester Classes; End 2nd 5 Week Classes & End 10 Week Classes
Tuesday, April 5	Start 3rd 5 Week Classes
Tuesday, April 12	Drop/Add Deadline 3rd 5 Week Classes
Monday, April 18	End 12 Week Classes, Non-Degree Students Register for Summer
Wednesday, April 20	"W" Deadline for 2nd Half Semester Classes
Wednesday, April 27	"W" Deadline for 3rd 5 Week Classes
Monday, May 2	Last Day of Classes (3rd 5 Week and 2nd Half Semester Classes Meet through Exam Week)
Monday, May 2	Last Day to Withdraw from University (All Classes)
Tue, May 3 – Sat, May 7	Final Exam Week
Friday, May 6	Commencement at 6:00 p.m. for all Graduate students (Masters and Doctorate)
Saturday, May 7	Commencement: 9 a.m. College of Business; 1 p.m. College of Education and College of Liberal Arts; 5 p.m. College of Health, Engineering and Science, Health, Engineering & Science and Liberal Arts & Commencement at 2:00 pm for the Colleges of Business and Education
Tuesday, May 10	Final Spring Grades Due by 3:00 p.m.

## Summer Session 2022

Date	Event
Wednesday, May 4	Senior Citizens Register for Summer Classes
Monday, May 9	Extended Full Summer Term Begins
Wednesday, May 11	Pre-Session, Full Summer, and Post Session Terms Begin
Thursday, May 12	Pre-Session Drop/Add Deadline
Wednesday, May 18	Full Summer & Extended Full Summer Drop/Add Deadline
Friday, May 20	Pre-Session Withdrawal ("W") Deadline
Thursday, May 26	Pre-Session Ends
Monday, May 30	Memorial Day (No Day or Evening Classes)
Tuesday, May 31	Session I and Summer Term Begin; Pre-Session Grades Due by Noon
Wednesday, June 1	Session I Drop/Add Deadline
Friday, June 3	Summer Term Drop/Add Deadline
Wednesday, June 15	Deadline to Register for an Internship
Thursday, June 16	Session I Withdrawal ("W") Deadline
Monday, June 27	Session I Ends
Tuesday, June 28	Session II Begins
Wednesday, June 29	Session II Drop/Add Deadline; Session I Grades Due by Noon
Thursday, June 30	Full Summer Withdrawal ("W") Deadline
Friday, July 1	Non Degree Student Registration for Fall Classes
Monday, July 4	Independence Day Observed (No Day or Evening Classes)
Tuesday, July 5	Classes Resume at 8:00 a.m.
Thursday, July 7	Summer Term Withdrawal ("W") Deadline; Extended Full Summer Term Withdrawal ("W") Deadline
Friday, July 15	Session II Withdrawal ("W") Deadline
Tuesday, July 26	Session II/Summer Term/Post Session/Full Summer End
Monday, August 1	Session II/Post-Session/Full Summer/Summer Term Grades Due by Noon
Monday, August 8	Extended Full Summer Term Ends
Monday, August 11	Extended Full Summer Grades Due by Noon
Monday, August 15	Senior Citizens Register for Fall Classes
Sat August 20 – Sun August 21	Welcome Back Days for Fall 2022 - Tentative
Monday, August 22	Fall Semester 2022 Classes Begin at 8:00 a.m.

**\*All dates are as of 01/19/2022 and subject to change due to COVID-19 environment.**

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